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CLINICAL STUDIES OF INEBRIETY—RATIONAL METHODS OF TREATMENT.

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In the rational treatment of inebriety, the first thing is the removal of all exciting causes. In a certain proportion of cases, alcohol is only a minor cause. It is an error to suppose that inebriety always depends upon the use of alcohol, and that its absolute removal will be followed by recovery.

The exciting causes which must be withdrawn are both complex and varied, only to be ascertained from a careful study of each case. In some instances these causes may be found in want of proper exercise, indigestion and irregularities of living, or in diseased conditions coming from overwork, underwork, or exhaustion from want of rest, sleep, etc. Many of these are physical, for instance, the sight of a man intoxicated, or stories of drinking, in which the pleasures and miseries are portrayed at length; or the efforts of a temperance lecturer, who in his attempts to alarm the hearer provokes the opposite feeling in an increased thirst for spirits. In my experience, extravagant descriptions of the sorrows from drink, and passionate appeals to stop, which is the burden of the reformed lectures, are often exciting causes and dangerous influences to a certain class of inebriates. On several occasions I have yielded to the entreaty of temperance people, and permitted lecturers to harangue my patients on the evils of inebriety, but always with bad results, invariably exciting, and in some cases stimulating, the old impulse to drink, perhaps by a reaction from the emotional excitement produced. Inebriates are always nerve exhausted and emotionally diseased; a reflex of the surroundings generally, feeling every change as keenly as the mercury responds to the state of the atmosphere. The exciting causes may be said to include everything which exhausts or unduly stimulates the weakened nervous system. The desire for alcohol is only an expression of this condition, which, from the experience of the patient, can be relieved only by spirits. These causes must be ascertained from a careful clinical study, and no permanent results can be expected unless the means of treatment are based on such knowledge. A common illustration is that of a man whose domestic relations are unhappy. His friends repeatedly upbraiding and scolding him for excesses in drink, threatening severe measures and means if he will not stop, and in this way rousing irritative emotions that react in cravings for spirits to relieve this feeling. Such cases find in the asylum freedom from these exciting causes, as well as abstinence from alcohol.

In another case, of a clerk who works, and is closely confined for many hours, living irregularly, eating, sleeping and using alcohol originally to quiet the protests of a starved organism. To him an asylum would be a relief from these irregularities, and the desire for alcohol dies out as these causes are removed. In both of these cases the surroundings of an asylum may be

greatly inferior to their accustomed homes, and possibly the removal from alcohol may not be absolute, and yet they recover, because the principal exciting causes are removed. If alcohol was the only exciting cause, the station house, the jail, or any room with locks and bars that would keep out spirits would be sufficient.

An asylum should be literally a quarantine, where every external exciting cause could be effectually taken away, and every condition of surroundings and circumstances that shall build up a healthy brain and nerve power gathered and applied.

If inebriety was a disease of some special organs, curative means might be found in certain remedies and particular forms of medication, which in a majority of cases would be successful. Experience shows that inebriety is the most complex of diseases, affecting all the organs of the body, requiring medication which influences the entire organism.

To effectually take away the exciting and predisposing influences, the patient must be placed in new surroundings, where all the mental and physical influences can be governed and controlled. The surroundings must be adapted to his special wants, where food, exercise, sleep, rest and enjoyment may be regulated so as to secure the greatest benefit from them.

Every hygienic means that shall build up the body and mind, together with medical skill, are requisite. These conditions cannot be obtained except in a special asylum or hospital, and no rational treatment will avail that dare not reach out to all the influences which enter into everyday life.

No home can furnish these means, however elegant it may be, and no insane hospital can bring freedom from all causes that are irritating; and no family physician can carry out a system of rational treatment that he does not direct personally, and have the power to enforce absolutely.

The exclusion of the exciting causes includes isolation from compounds of alcohol by a complete control over the patient, preventing him from procuring spirits when the impulse comes over him. In the case of a periodical inebriate, the return of the paroxysm may be retarded by the surroundings, and the body and mind built up so as to resist it, but it is certain to reappear, and the patient may be at the time more or less powerless to control the impulse.

If alcohol is accessible it will be used, and unless the patient is under control this cannot be prevented. Hence an institution must have legal power to restrain patients at times, preventing them from following the dictates of a diseased impulse, which grows gradually less and less, until it finally disappears. In a large majority of cases, this impulse is simply the reaction from certain states of exhaustion and debility, whose gratification may not impel them to great endeavors to procure it. As the rest and quiet of an asylum builds up healthy brain action, these reactions grow less, and are more easily controlled, and then, like the impulse of the periodic inebriate, die out.

Thus, the removal of existing causes must include all conditions which impel a man to drink, and all facilities to procure spirits while under treatment. This cannot be done in the centre of a city, in close proximity to places where spirits are sold, for the knowledge of this fact is often a predisposing cause to keep alive a thirst for spirits; nor can it be done where other active causes are not removed, as, for instance, excitement and exhaustion of any kind, want of proper food, rest, conditions of irritation, etc.

In every case of inebriety there is a definite physical cause, not always in alcohol, but in conditions which lead up to the constant use of spirits. Also, from the time of the first toxic action of alcohol there are special causes of exhaustion which may coöperate with or precipitate conditions of anæmia, instability and infirmity of the nerve element.

This state increases with the repetition of alcohol, and the combination of causes, growing further and further from the normal health standard. The rational cure can only come from definite physical change. This may be summarized in rest and proper nutrition of the nerve cell. The nerve cells of the mind centres are exhausted, and repair can only take place through rest. The blood must be improved, alcohol, of all other substances, destroys and perverts this function.

The shriveled appearance of the blood disks in the blood of inebriates proves that the organism is being starved and nutrition is broken up. Hence, special means, after the patient is quarantined from all exciting causes, in a proper asylum, are essential to improve the nutrition of the blood. Of these, iron, arsenic, cod-liver oil and milk (where it can be assimilated), are excellent. Food that will build up the tissue most rapidly should be given, particularly oatmeal, barley and rice, with wheat and corn, prepared in various ways; and fruits of nearly all kinds are found most useful. Of the various remedies that are given to build up the nerve and brain

force, the bitter barks, *nux vomica*, chlorate of potash, and phosphoric acid, are found by experience to be valuable. The electric current is, in a large proportion of cases, a decided tonic and stimulant; in others its effects are irritating, and its application is followed by a tumultuous excitement of the nerves and muscles that lasts a long time.

Sometimes these cases will only be benefited by the electric current in the latter stages of the treatment. This apparent idiosyncracy seems to pass away as the nerves grow stronger. In the first week of treatment this is not infrequent, and later, after a relapse, it may appear. The best results, in most cases, will probably be attained after one or two months of treatment; then the current should be applied along the spine every other day.

In some instances the sedative action of the current acts like a specific in cases where nervous agitation comes on from general causes, and grows gradually into an impulse for spirits. In the progress of the case under treatment many patients exhibit paroxysms of restlessness and general melancholy or irritability; sometimes these waves of mental and physical disturbance pass off in a short time, without provoking a desire for alcohol; in others the desire is present from the first, but is concealed, for the reason that the patient is either anxious to gratify or control it. These paroxysms are fortunately of short duration, and are succeeded by a period of calm and apparent full control, until finally they disappear.

Much skill and study is requisite in each case, to treat this condition or stage of the disease. To illustrate, a patient who has previously been quiet and in full accord with the physician in all efforts and means of treatment, will suddenly become suspicious and be greatly agitated over trifles, complain of restlessness, and inability to be quiet. He will eat and drink impulsively, either want large quantities of medicine or refuse to take any, and be confident that some other plan of treatment is necessary. The desire for drink will appear sooner or later, and all these diseased functional impulses seem to concentrate in that one direction, although the patient cannot realize its approach, and will be confident he will not use spirits. In some cases positive physical restraint at this time is injurious; in others, stimulating and quieting. The use of sedatives and narcotics, which seem to be indicated, vary greatly. Some forms of opium will cut off this paroxysm at once, or simply hold it in abeyance for a time, after which it breaks out with greater intensity. Belladonna and the vegetable narcotics are equally uncertain, and their physiological action is sometimes cumulative and long delayed. The bromides are more certain, yet they act often as simple checks for a time, followed by greater explosions. Where they are long continued, the paroxysm is worn out, apparently, and from debility it does not appear again. The electric current is more accurately a nerve sedative in many cases, than other remedies. Not unfrequently the most aggravated symptoms will disappear in an hour from the application of this means.

When these paroxysms occur at night, the patient is unable to sleep, and will walk the floor like a condemned prisoner, and should they last two or more days, some form of delirium, generally of suspicion and persecution, will appear. At such times the tact and skill of the physician is taxed to its utmost. Exercise is frequently suggested to the patient as the remedy, and like the drugs mentioned, it not unfrequently prolongs and intensifies the very condition it seeks to obviate.

The Turkish bath, like the electric current, is particularly valuable in a certain number of cases, and breaks up the paroxysm at once. In other cases it produces a sense of exhaustion that develops into a craving for spirits.

In one case the patient (an irregular inebriate), after a bath, becomes excessively hungry, and suffers from thirst; if he did not eat soon, he would have an intense desire for spirits, which would be very hard to restrain. In another case, when the paroxysm had developed into a sense of want of alcohol it would disappear as soon as the patient began to sweat in the hot room of the bath. The effects of moral treatment at this time are also variable and curious, from the variety of means, and the mysterious power they exercise. In an asylum where these periods can be studied carefully, and all the surroundings are controlled, mental impressions seem more powerful and lasting.

The influence of a letter from friends may either break up this period or provoke it. For instance, a wife writes to her husband of some trifling loss to herself or family, and the husband, a patient who has been resting cheerfully up to this time, begins to have the wildest apprehensions, and a tumultuous agitation, fearing the general failure of himself and all things. The condition, if not controlled, will end in an overpowering desire to drink again.

Medicine will not answer, but strong counteracting impressions and diversions are essential to

break up this state. Sometimes it is necessary to write to friends, and have them send the patients letters that will accomplish the purpose. Again, the diversion must come from the surroundings, by interesting the patient in some special work. Unlike an insane asylum, these moral and mental appliances for treatment must be positive, and interest the patient, either by their novelty and variety, appealing to every emotion, or through their intelligence, arousing a new train of thought and action. A large majority of patients, during the first three months of treatment, suffer frequently from these emotional disturbances or paroxysms, at intervals, and others are rarely free from them. The intervals between these periods are generally irregular, unless the patient is a periodical inebriate, or dipsomaniac, when they recur with great regularity. It has been found, without knowing why, that labor and occupation are essential, hence it has been urged by a class who know only in part, that the treatment cannot be successful unless this is the principal means. But in face of their assertions, hard labor in prison and close occupations do not heal or restore inebriates who are confined in such places. The fact is that occupation of mind and body, applied at certain times in the treatment of inebriety, is a veritable therapeutic measure, but its application is limited to particular conditions and times.

To make chair-bottoming or shoemaking the labor of an asylum, and force all inmates to engage in it, would be to fail in curative measures; or to go to the other extreme, and gather all patients into prayer meetings, appealing to their religious emotions two or three times a day, is equally certain to fail in a permanent cure. Occupation of mind and body is rationally all means which will prevent and break up these nerve paroxysms, and divert the mental and physical energies from exploding through these inebriate impulses. A few illustrations from every-day life in an asylum will explain this more clearly.

Case 1.—Is a periodic inebriate who every seven days has a period of intense sorrow and anxiety about his family. The treatment, besides small doses of bromide of sodium, consists in engaging his attention by driving out, giving him certain care and responsibility, enjoining on him the most minute directions as to exercise and baths. In twenty-four hours this passes away.

Case 2—Is an irregular inebriate who, from various causes, will become nervous and restless, and anxious to go back to business, although he has no business and no prospects of any kind. He will prepare and carry out the most elaborate schemes to go away, and be greatly agitated over them. After baths and the electric current (if not contra-indicated in the treatment) the mind can be diverted by examining the resources of Alaska or Central America, to find out the best prospect for business enterprise. In a few hours the agitation passes away and he is contented.

Case 3.—Is an irregular inebriate who becomes deeply engaged in the wrongs of others, and for several hours will go about seeking redress in the most hysterical manner, with much emotional excitement. If a patient has lately been admitted, and is suffering from what he thinks should be relieved by alcohol, he will espouse his cause and intrigue to procure spirits for him. The moral treatment consists of sharp reprimands and prompt, decisive commands to desist and look after his own interest. This, with remedial measures will suffice, and in a few hours he recovers.

No. 4—Is also an irregular inebriate, whose periods of nervous agitation disappear after a long walk.

No. 5—Is a similar case who recovers from some occupation of a few hours, as, for instance, working in the garden, arranging books in the library, or copying some article.

No. 6—Is a dipsomaniac who suffers every ten days from profound religious depression and agitation. The effort and excitement to write a temperance lecture will break up this depression. Brief religious service once a day, consisting largely of singing, in which all the patients may join, have a marked effect, not only to divert the mind, but to rouse up a new train of thought and feeling. Lectures, concerts, theatricals that are short and not exciting, have a strong influence and power in many cases. In these cases the study is to find subjects outside, upon which the mind may be concentrated and the energies of the body engrossed.

FRACTURE OF THE OS FEMORIS; ITS METHODS AND RESULTS.

BY E. MICHENER, M.D.,

Toughkenamon, Chester County, Pa.

I accepted the profession of medicine as a God-given trust, with feelings similar to those expressed by Dr. Winston (Reporter, Nov. 4th, p. 523), though perhaps with very inferior facilities. Under the growing infirmities of age, I have re-

leased myself, as far as practicable, from its responsibilities; but this does not absolve the obligations which I owe to the younger members of the profession, and to suffering humanity.

I was very early impressed with the incertitude of the teachings and the various methods employed in the treatment of fractures, especially the typical lesion of the shaft of the os femoris, which so often resulted in shortening and permanent lameness.

Under this impression, I devised a method of treating this fracture, which has proved entirely satisfactory and successful, during a period of more than sixty years. For a brief notice of this method, see MEDICAL AND SURGICAL REPORTER, Feb. 8th, 1881. See also, How Bones Break, etc., Nov. 19th, 1881.

Subsequently I brought the subject before the Medical Society of Chester County, for its consideration, who graciously appointed a committee of inquiry. A portion of the committee made me a courteous and acceptable visit. They referred me to Dr. Ashhurst, Professor of Clinical Surgery in the University of Pennsylvania, as a standard authority in such matters. Just where we should look for, and expect to find, the highest and noblest conception of practical and artistic skill in the treatment of this important lesion. But, so far as I know, the committee has failed to report the result of their inquiries. For

"Who, that from Alpine heights, his laboring eye
Shoots round the wide horizon, to survey
Nilus, or Ganges, rolling his bright waves
* * * * * * will turn his gaze
To mark the windings of a scanty rill
That murmurs at his feet?"

I accordingly reported my views to Prof. Ashhurst, emphasizing the facts—

1. That bones generally break dentated, the dentures readily interlocking, and holding the fragments in place.

2. That I had not found a fracture so oblique that the serrations would not hold the fragments in position when properly adjusted.

3. That I had never employed direct mechanical extension in the treatment of this fracture, and

4. That I had never discharged a patient with a shortened limb; or a limper.

To this I received the following kind and courteous reply:—

"DEAR DOCTOR: In reply to your very interesting letter, I would say that, in my experience, oblique fractures of the femur are more common than transverse fractures; and that I cannot recall more than a single case in which I have succeeded in curing a fracture of the thigh without shortening.

"Though, no doubt, most fractures are at first serrated, and this serration may, for a time, keep the fragments together, yet on the conversion of bone into granulation tissue, which precedes union, those serrations sometimes disappear, and hence consecutive shortening is very common.

"Very truly and respectfully yours,

"JOHN ASHHURST, JR."

I was grieved at this rebuff from such a source; a manifest indifference to the practical results which I had reported. But on taking up the REPORTER of 4th February last, I was delighted to see the announcement of a clinical lecture on fractures of the long bones, by Dr. Ashhurst, only to be again disappointed.

Now, standing at the portal of another world, I desire to make a hasty comparison of some of the methods and results of Dr. Ashhurst and myself.

There is shortening; you, therefore, need some means of extension. The older surgeons relied on the use of their hands, and upon splints, to maintain it; but in modern times the weight extension has been adopted. The method is now generally known as Buck's, or the American treatment.—*Dr. Ashhurst.*

I own to an "old surgeon," I greatly prefer a careful diagnosis, a skillful manipulation, and an accurate adjustment, and the retention of the fragments by appropriate dressings. These are of too much importance, in their immediate and ulterior results, to be delegated to the most ingenious combination of iron pulleys and weights.

Rather, let an assistant make the extension; very gentle at first, increasing it slowly, to avoid pain or exciting the femoral muscles to resistance. It may require five or ten minutes, an hour; no matter; don't be in a hurry. When the fragments are brought into a favorable position they are, in most cases, easily coapted. The dentures interlock, and the tonicity of the muscles holds them together. It is a rule, to which there should be few exceptions, that the bone should not be considered set until this result has been obtained.—*Dr. Michener.*

I do not suppose that we shall find much shortening in this case, as extension has been applied for forty-eight hours. We now have the patient squarely on his back. The right leg measures almost 34 inches; the left, not quite 33 inches.—*Dr. Ashhurst.*

Here appears to have been a disappointment. The limb was still an inch too short. So much to the credit of weight extension.—*Dr. Michener.*

We have applied here one brick. This afternoon we will add another, and, in the course of a week, a third. The weight should not, as a rule, exceed twelve pounds. What has become of Snowden's perfected apparatus? (REPORTER, April 2d, 1881.)—*Dr Ashhurst.*

I have already stated, and repeat the assurance, that I have for a long period treated patients with this fracture, from six months old

up to more than seventy years, successfully, without mechanical extension and without shortening. The question then arises, whether is it better to pursue the indefinite and uncertain method of machine extension, with all its horrors, or to reduce the fracture at once, and hold it so by appropriate dressings? Whether is the suffering or comfort of the patient worthy of the surgeon's notice?—*Dr. Michener.*

I have said indefinite and uncertain; I cannot recall more than a single case in which I succeeded in curing fracture of the thigh without shortening.—*Dr. Ashhurst.*

This shortening, if it does occur, from the conversion of the fracture facets into granulation tissues, and the subsequent condensation of the callus; is necesarily limited by the extent of the softening, is hardly appreciable; or what my friend Dr. Edw. Jackson has aptly termed, shortening without limping. I shall endeavor to show that no such retraction of the limb can take place under proper treatment.—*Dr. Michener.*

We need some support for the sides of the limb. I think that you will obtain better results from the use of these old fashioned, long splints—Physic's modification of Desault's apparatus. The outer splint should reach from the axilla to below the foot; the inner one from the groin to below the foot. We now secure the splints (rolled in a splint cloth), to the limb; padded with junk bags filled with bran. The splints are confined by five strips of bandage; one at the ankle, one at the knee, one below the groin, one at the crest of the ilium, and one around the chest.

When removed to the ward, we shall make counter extension by elevating the foot of the bed.

When the effusion in the knee-joint goes down, so that we can handle the joint without pain, we shall, at each dressing, if necessary, rotate the knee inwards, in order to overcome the tendency to eversion.—*Dr. Ashhurst.*

When, in the name of humanity, is this cruel, useless and meddlesome surgery, this tugging and twisting of the broken bone, to have an end?

It is no small matter to subject a patient to be thus pinioned down on his back for six or eight weeks, with a weight extension of twelve or more pounds, to be counteracted by making the bed an inclined plane and the head of the patient the most depending part. Does the partial success reported by Dr. Ashhurst warrant or excuse him to persist in such severe treatment, to the exclusion of milder means, which claim greater success?

In the case of children, from six months upward, I have always used an extemporized splint, made on the occasion, by cutting a shingle in two, and nailing them on an angular block. This simple fixture, with a bandage of strips, and a set of thigh splints, have fully met every indication.

For adults I use a more elaborate instrument, constructed more than sixty years ago. It is adaptable to all cases, and is always ready for use. Like the above it is virtually nothing more than an angular, concave, bed splint. (See REPORTER, 8th Jan., 1881.) The minor thigh splints are important. They are formed of three strips of light wood, glued on a piece of muslin or thin leather. They should always embrace the whole length of the thigh, exclusive of the condyles. The padding should not exceed two or three smooth folds of soft flannel.

The dressing then reads, the angular bed splint, a strong bandage of strips, two lateral, and an upper thigh splint; the whole held by four unyielding leather bands, buckled tight around them. The foot may be supported, or left free, at the option of the patient, as the foot suspended over the angular splint has neither the tendency nor the power of eversion. This is only one of the many advantages derived from the angular position of the limb. I have never used any other. I prefer an angle of 35 or 40 degrees.—*Dr. Michener.*

You see, by this dressing, we fix the joints on both sides of the fracture. You may lay it down as a rule, *that in all fractures of the long bones, you must fix both the joint above and the one below the seat of fracture.—Dr. Ashhurst.*

I demur to this rule, as being erroneous in principle, and pernicious in practice.

It is self-evident that the long splint will rest upon the trochanter major and the external condyle. The inner one upon the internal condyle and in the groin, which is always intolerant of pressure. Thus the more important bone and surrounding tissues of the thigh are left without any more efficient support than bags of bran are capable of affording. And what is the result? The joints have been fixed; the fracture only partially so, if at all. The patient must, and will, seek relief by moving, so far as he can. Every motion extends to the injured limb and reacts upon the most movable part. And the joints being more stable than the broken bone, the reaction must inevitably fall upon it, as the point of least resistance.

I do, on the contrary, lay it down as a rule in this form of fracture, *the dressings should be exclusively applied to the injured thigh. Make its integrity complete by its own appliances, leaving the hip and knee joints free to respond to every movement of the body.*

Here, the whole extent of the femoral tissues are firmly grasped, and held together; muscular action is completely suspended; and any necessary or accidental motion reacts upon the free joints, leaving the intervening thigh to move in its entirety, without disturbance of the fracture. Hence the importance of an early and accurate adjustment of the fracture, before the dressings are applied.

Whatever appliances may be used, I believe that the secret of success lies in the skillful adjustment of the fracture; and a strict observance of the above rule in the application of the femoral dressings. Dress the injured member; not the man.—*Dr. Michener.*

It is not safe to allow the patient to walk in less than eight weeks. I remember a patient in the Pennsylvania Hospital, who had made

a good recovery [?] from fracture of the thigh, and was allowed to go about at the end of six weeks. There was at that time one-fourth or one-half an inch of shortening. After two or three days there was found two inches of shortening. At this time the callus uniting the bones is soft, and the pressure from walking readily causes consecutive shortening.—*Dr. Ashhurst.*

I have usually substituted light dressing, at the end of six weeks. But after the dressings which I used, the femoral muscles do not for some days recover power to use the limb in walking.

This extraordinary case seems to have been brought forward to illustrate what the lecturer considers to be the ordinary conversion of bone into granulation tissue. But it cannot belong to the same category with Dr. Jackson's cases of shortening without limping.

As a rebutter, I will recur to a case, already published (REPORTER, Nov. 19th, 1881, p. 567). A child of seven summers had her leg caught and dragged, under a log, on the public road. The soft parts of the upper anterior and inner tibial region were entirely torn away, the bones broken, the leg doubled back on the thigh, and the fragments all projecting. I noticed that the fractures were neither transverse nor oblique; they were dentated. After cutting off more than an inch of the upper tibial fragment, which was denuded of its periosteum, and left without any possible covering, I interlocked the dentated fragments of the fibula; and with the aid of a light lateral splint, and an angular splint underneath, rendered it an available stretcher to preserve the length of the limb, during the long period required for the cure. Notwithstanding the arduous duties imposed on this youthful fibula, there does not appear to have been softening, and consecutive shortening. There was, and is, no appreciable difference in the length of the limbs; nor the semblance of a limp. The subject of this narrative, a highly respected young lady, Mary Woodward, resides with her father, George Woodward, in Unionville, this county. Reference may be made.—*Dr. Michener.*

INHALATIONS OF ALCOHOL IN CROUPAL DIPHTHERIA.

BY DR. C. T. MELSHEIMER,

Bluffton, Ind.

Will the inhalations of alcohol cure croupal diphtheria, is the question that I wish to submit to your numerous readers, with a view of its solution by frequent trials in this exceedingly fatal disease. Some six weeks ago I was brought in contact with a typical case of this kind, and my former experience admonished me of the frailty of our present mode of medication, yet, as a matter of ease to my conscience, I gave the patient the benefit of the most approved treatment for some time, without deriving any benefit. The fact was, something more had to be done, and that something was nothing more than the inhalation of hot alcohol, by way of experiment. Under this treatment the patient made a good recovery, without the usual sequelæ that follow the graver forms of this disease, and were it not for a slight aphonia, her health is as good as it was before her marvelous escape from death. How much credit is due to this form of treatment I am not prepared to say, but my firm belief is that it was instrumental in saving her life. It may be possible that it had no effect whatever, and the recovery was simply due to one of those remarkable evolutions in nature that sometimes so unexpectedly comes to our relief in hopeless cases. Hence a more extensive trial will be necessary to determine the efficiency of this course of medication, etc.

On the 21st of October last I was summoned to visit Hattie Herbst, a resident of this place. Her mother reports her to be seven years old, and that she had been in good health prior to the 15th, when the exposure of a buggy ride through a "raw and chilly atmosphere produced a chill, followed by a mild fever. On the 16th she was well enough to attend school, and she continued so up to the afternoon of the 17th, when the return of another chill forced her to go home. On Wednesday, the 18th, her mother gave her several doses of quinine, which had the effect of abating the fever on the following day; but in the evening a hoarseness declared itself, with a dry, irritative cough, for which some kind of patent expectorant was given. Friday she appeared some better and continued so up to Saturday, when her cough and hoarseness progressively increased, and by night her cough had become croupal and her speech reduced to a mere whisper. This, in brief, is the history her mother gave, and the reason for not seeking medical aid sooner was that she made no special complaint of pain, or presented other symptoms of alarming illness until within a short time of my visit. I found her pale and anæmic-looking; skin dry, not very hot, with a temperature in the axilla of 99.30.° Head clear, senses intact; complains of pain in the left mastoid region. Countenance expressive of anxiety; yellow-coated tongue; a highly congested mucous membrane of the fauces and pharynx; enlarged tonsils, studded with irregular patches of dark gray deposit, forming parchment elevations that were surrounded with a border of dark red, which bled on the slightest touch. Perspiration stridulous and labored; croupal cough, with aphonia; no appetite, stomach irritable, bowels inclined

to constipation, urine partially suppressed, high colored, acid reaction, albuminous, and a specific gravity of 1.030; extremities cold; pulse 130 and very weak.

Now, if there is anything in the practice of medicine that is better calculated to humble the pride of a physician than a case of this kind, I have thus far failed to make the discovery, and I am very thankful for it. But we are called on to do something, and in our doing so we but demonstrate the impotency of our remedies and exhibit our ignorance of the cause to which they are directed for its removal. To be as consistent as possible with our imperfect knowledge of this disease, I prescribed stimulants in combination with iron, quinine, and chlorate of potash every three hours. Topical applications of tinct. iron and glycerin every four hours. Ordered the atmosphere of the room to be kept constantly moist by means of a large wash boiler of hot water, and in connection used inhalations of a five per cent. solution of carbolic acid every four hours, by means of a small antiseptic atomizer. This treatment was continued with variations in inhalation for some sixty hours without any improvement whatever; in fact, grew from bad to worse right along. There was a progressive increased difficulty of breathing, with spasms of the muscles of the glottis, that threatened a speedy death from asphyxia. Her countenance and extremities were purple. Pulse 160, thready and irregular, recession of the sternum and intercostal spaces with each inspiratory effort; she appeared to be beyond the relief of medicine, yet notwithstanding this hopeless condition I practiced the doctrine that as long as there was life there was hope. I abandoned all former treatment, with the exception of moist air, and resorted to the inhalations of hot alcohol, knowing that it would not compromise her condition in the least, and might possibly be the means of warding off death for a short time, at least; the alcohol used was rated at 88 per cent., and maintained at a temperature of 150° in the medicated cup. It was inhaled at a temperature of 120°, and reached the lungs through the nozzle of the atomizer, with a strength of about forty per cent. During the inhalation, which lasted about fifteen minutes, the pulse lost its intermittent character, and became somewhat fuller, the breathing more moist and less difficult. The paroxysms, that threatened speedy dissolution, were relieved, and a decided improvement for the better gave some hopes of recovery. The inhalations were kept up at regular intervals of two hours through the night, and by the following morning she presented every promise of returning health. The blueness of the face and extremities was disappearing, her breathing was much less difficult; she expectorated large quantities of flaky, membranous matter, had increased secretion from the kidneys, and improved appetite. To facilitate the expectoration a preparation of syr. senega, spts. nit. and sanguinarine, in sufficient doses for this purpose, was prescribed every three hours. This, in fact, embraces the only treatment, and with exception of a slight aphonia yet remaining, she is restored to health. At no time throughout the disease did the thermometer register more than 100°, with a low blood pressure, as was indicated by the character of the pulse. Her urine was scant; the eliminations from the kidneys seemed to hold a direct relation to the difficulty of breathing; at her worst period the amount of albuminous matter was equal by bulk to the urine.

Query.—What effect has the highly carbonated blood on the vaso-motor nerve? Does it become partially paralyzed to that extent that the peripheral zone of the renal capillaries becomes so weakened as to lose the power of resistance, and as a consequence, produce a passive interstitial congestion. I pause for a reply.

Hospital Reports.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

CLINICAL LECTURE BY WILLIAM PEPPER, M.D., LL.D.,

Professor of Clinical Medicine in the University of Pennsylvania.

Reported by Wm. H. Morrison, M.D.

Lymphatic Pseudo-leucæmia.

Gentlemen:—Owing to my absence, I had not an opportunity of examining the patient from whom the specimens before us were removed.

I shall first read the history of this case, and then call attention to the results of the autopsy.

F. H., white; age 22 years; resident of Pennsylvania; a brakeman on the railroad by occupation. When ten years old, he began to work at picking slate, and from that time he has been much exposed to the weather. For the past two and a half years he has been employed as a brakeman. He used tobacco in every form, and coffee and alcohol (chiefly in the form of malt liquors) to excess. At the age of thirteen he had gonorrhœa, but denies ever having had syphilis. His parents are living and healthy; one sister has dropsy and another ophthalmia; another sister and two brothers are living and healthy. He has had whooping cough, but none of the specific diseases of childhood.

About the time that he had gonorrhœa, *i. e.*, nine years ago, he noticed enlargement of the glands under the right ear. These increased in

size, and gradually other glands became involved. All the tumors except one in front of the left ear were painless.

Six months ago urination increased in frequency, and the passage of the urine began to cause irritation. This became more marked until, when he was admitted to the hospital, he had to empty his bladder every five minutes.

About four months ago he began to feel a tingling, pricking pain in the lower extremities, extending from the crests of the ilia to the toes. He would occasionally, while urinating, feel a quick, darting sensation pass through the legs. During the past month the pricking pain extended above the iliac crest into the renal regions. The severity of the pain obliged him to quit work two and a half months ago.

Two months ago angeioleucitis, *i. e.*, inflammation of the lymphatic vessels and glands, developed in the left leg. This, apparently, was caused by the pressure of a large mass of glands upon the femoral vein and the lymphatics, as they pass through Scarpa's triangle. This condition remained for about a week.

He had lost some flesh, but with all his suffering, he had not become very much emaciated. He had lost strength, particularly during the past two or three months. He suffered from occasional hemorrhages, usually from the nose, but once from the bowel.

His condition at the time these notes were taken was as follows: "Hair brown; eyebrows and lashes black; the pupils of the eye contracted; face sallow; conjunctiva and sclerotic pearly and anæmic; the mucous membrane excessively pale." In other words, he presented all the evidences of a high degree of anæmia. The cervical and post-auricular glands enlarged; the smaller glands being round, smooth and painless, and the larger masses nodulated, and apparently made up of an aggregation of small glands. These were not freely movable. Only one of these masses (one in front of the left ear), was at all painful. At the vertex of the skull there was a ridge, running obliquely forward from right to left. This was firmly adherent to the tissues beneath.

Three years ago a gland was removed from the right side of the neck. The tumors were larger on the right side than on the left. The glands in the axillæ were enlarged. Both groins were affected, the left more than the right.

The left leg was white, œdematous, not painful; the skin tense, shining and cooler than on the opposite side. There was no œdema of the right leg. The tongue was red, flabby, fissured, but not coated. Appetite pretty good, and, except when he was indiscreet in his diet, he had no dyspepsia. The bowels were constipated and the stools dark in color. On percussion, the liver dullness was found to extend from the fourth rib to one and a half inches below the margin of the ribs. Hence there was considerable enlargement of the liver. On the left side a mass, dull on percussion, was found extending from the sixth rib above, to the level of the umbilicus below, and from the median line in front to the left lumbar region behind, where the dullness merged into that of the left kidney. This could scarcely be anything else but the spleen, greatly enlarged. The abdomen was tympanitic and without effusion.

The heart was pushed upward, the apex beating in the fourth interspace, in the line of the nipple. On auscultation, there was discovered a low-pitched, indistinct, blowing, systolic murmur, loudest at the apex and conducted into the axilla in the line of the apex. There was retraction of the apex with the systole of the heart; that is, at each beat of the heart the intercostal tissues at the apex were drawn in. The second sound was sharp. The aorta could be felt beating at the supra-sternal notch. The pulse was full and rather compressible.

Urination occurred every five minutes and was accompanied by severe pain. The urine was usually clear, but at times contained yellowish, stringy matter. The attempt to retain the urine caused great pain.

Before going further, let us consider the condition of the heart. Did the symptoms indicate disease of the heart? We have found that there was displacement of the heart, retraction of the tissues over the apex during the systole, and a low pitched murmur heard over the body of the heart and transmitted to the left. We cannot say that there has not been pericardial adhesions, which would cause retraction of the apex as the heart passed into systole; but the heart is so displaced and the normal relations of the parts so altered, that I should not attach the same importance to this sign in the present case, as I should if it were found with an enlarged heart and the liver and spleen about normal.

Does this murmur indicate mitral regurgitation? As you are aware, a murmur occupying the time of the systole of the heart, heard best at the apex and conducted to the left in line of the apex, is, under ordinary circumstances, pathognomonic of mitral regurgitation. Here, however, was a man intensely anæmic; when the crasis of the blood is so altered, it is thrown into vibration in its passage through the heart and blood vessels, and gives rise to a murmur. This is termed an anæmic or hæmic murmur. Such a murmur may have been present in this case, and have been conducted to the left through this large mass lying in contact with the heart, thus explaining the transmission of the anæmic murmur in that direction. Ordinarily, a hæmic murmur is not transmitted to the left, as its force is not sufficient to carry it through the spongy tissue of the lung. An organic murmur is carried to the left, because it is usually a murmur of greater penetrating force, and, in addition, is usually associated with alterations in the size and situation of the heart, which push away the lung tissue. From the history I should not definitely conclude that there is organic disease of the mitral value; even if there be a little disease of the mitral valve, it is clear that the intensely anæmic state of this man's blood would exaggerate any murmur produced there, and would explain in part its loud transmission to the left.

In regard to the urinary trouble. It is apparent, from the frequency of micturition and the character of the urine, that the condition could not be explained by mere acidity of the urine. There must have been chronic cystitis.

Finally, what are we to think of this curious, pricking pain which has been described as extending from the toes to the line of the ilium, and later, extending to the region of the kidney? I think this to have been due to the pressure of enlarged glands within the abdomen, upon the nerves emerging from the vertebral foramina, and passing into the legs.

I shall now complete the reading of the history.

The cremasteric and patellar reflexes were good. Sensation was diminished in the lower extremities. The line between normal and impaired sensibility corresponded to the crest of the ilium. There was loss of power over the lower extremities, *i. e.*, paraplegia; with this, dull pains in the calves of the legs, and darting pains and twitching in the lumbar region, were complained of. There was no sensation of chorda, *i. e.*, the feeling as though a cord were tied around the waist.

He was slightly hard of hearing in the left ear, but the other special senses were normal.

The urine was normal in quantity, with a specific gravity of 1.020. It contained neither albumen, nor sugar. The sediment consisted of amorphous and other phosphates, vesical epithelium, pus cells, but no casts, the absence of casts showing that the kidneys were not affected.

Sept. 5th. Œdema increasing.

Sept. 11th. The appetite began to fail, and there was dribbling of urine.

Sept. 12th. The blood was examined, and the proportion between the red and white corpuscles found to be normal.

Sept. 13th. The urine continued to dribble, the pain in the back still present. Temperature 100°. Continued to sink until he died, yesterday, Sept. 18th.

In considering these marked symptoms of paraplegia, etc., which I have just read for the first time, let us carefully study the condition of the spinal cord, as we have it from this relation of symptoms.

We here notice an interesting relation between the urinary symptoms and those belonging to the spinal cord. There are certain groups of cases where it is sometimes puzzling to determine which has been the primary trouble. A man who has had long continued irritation of the bladder gradually becomes paraplegic. In such a case we have to decide whether there has been a slow degenerative change in the antero-lateral columns (the motor columns) of the cord, gradually producing paraplegia and affecting the walls of the bladder (which are always affected when the paraplegia becomes at all complete), allowing the urine to remain in the bladder and undergo putrefactive changes, thus becoming a source of irritation, and producing cystitis; or whether, as a result of the long standing cystitis, the irritation has, by reflex influences, so acted upon the lumbar portion of the cord that its nutrition has been affected to such an extent that this portion of the cord passes into a state of anæmia, mal-nutrition, and possibly of softening. We have produced in this way reflex paraplegia, which may eventually be associated with organic changes in the cord.

The exact way in which the irritation of any extremity or surface gives rise to reflex paralysis is interesting and instructive, but a somewhat difficult subject for consideration. There are different views concerning it, but, in the first place, it is clear that the constant drain upon the nerve force of a section of the cord, which must occur where there is a constant irritation for months or years, must end by exhausting that centre. This may give rise to a functional paralysis. An examination of the cord may reveal no signs of organic disease.

Again, you can readily understand that as the vessels of any part are influenced by nervous action, and that as distant irritation is able to cause spasmodic contraction of these vessels, a long continued irritation may cause such a continuous contraction of the blood vessels of a segment of the cord, so impairing its nutrition, that it may pass into a state of slow degeneration and passive softening. In the present case the urinary irritation had certainly lasted sufficiently long to produce reflex paraplegia. But urinary irritation was not the only trouble this man had. There were masses of enlarged glands externally, and in all probability internally also. I have no doubt we shall find the glands along the spinal column enlarged. Here, then, might be another explanation of the paraplegia: direct pressure upon the nerves emerging through the vertebral foramina; not only so, but the enlarged glands may have extended through the foramina, and actually pressed upon the substance of the cord. These possibilities must be considered. What do we learn from a study of the patellar and cremasteric reflexes? These were well marked. The reflex from tickling the sole of the foot was also present. These reflex phenomena are impaired when the posterior columns of the spinal cord suffer from organic disease; but they remain and may indeed be excessive in cases where the lateral or the antero-lateral columns are the seat of disease. You have heard that sensation was impaired. This would point to a lesion affecting the posterior columns of the cord. So that it is not improbable that we had in addition to the reflex paralysis (which we might expect to find from the long continued cystic irritation), an encroachment of these enlarged glands upon the nerve cords or on the spinal cord, or even actual changes in the spinal cord.

This is an exceedingly complicated and interesting case, and we are at a great disadvantage in having only the post-mortem record from which to study it.

What was the matter with this man? We have considered the vesical and the nervous trouble, but neither of these was the primary trouble. The initial disease was a progressive hypertrophy of the lymphatic glands, and eventually enlargement of the liver and spleen. We find enlargement of the lymphatic glands in syphilis, cancer and scrofulosis. We also find it where none of these diseases exist, and where it apparently constitutes the whole disease. The patient sinks into a condition of anæmia; the exhaustion increases, and he dies. After death the lesions are those of a curious overgrowth of the lymphatic structures.

Had this young man cancer? Primary cancer

of the lymphatic glands is exceedingly rare. Cancer of the glands usually occurs after cancer of some other part. A man has a cancer of the testicle, and the glands of the groin become affected, or a woman has a cancer of the breast, and the glands in the axilla become involved, but cancer very rarely begins as a primary disease in the lymphatic glands. Still I have seen it occur, even in young children. I remember distinctly a case, which was sent to me several years ago, of a little girl, about seven years old, in whom a lump came under the left ear, and which proved to be a primary sarcoma of the glands; I watched the case throughout its whole course (about nine months); it terminated as a fungus hæmatodes. When cancer does occur in this way, it does not usually affect the glands all over the body; it runs a rapid course and invades adjoining tissues. In this case nine years had elapsed since the appearance of enlargement; there had been a widespread development; the tumors were painless; they had never softened nor undergone suppuration, and they had never invaded the surrounding tissues, but had remained movable. We may then dismiss cancer.

It was not a case of scrofulosis. Scrofulous glands usually, sooner or later, undergo inflammation and suppuration, but here, for nine years, the glands had gone on enlarging, and not one of them showed the least sign of inflammation. Nor has there been a secondary development of tuberculosis, as commonly happens in cases of scrofulosis.

Occasionally syphilis, whether acquired or congenital, gives rise to widespread disease of the lymphatic glands. The history of the condition of this man's father and mother, and of the other members of his family, would not indicate that he had suffered from inherited syphilis. He had neither the notched teeth, the interstitial keratitis, the ozæna, the evidences of cutaneous eruptions, nor the affections of the osseous system, which are so commonly found in inherited syphilis. There was no evidence of acquired syphilis in his history or symptoms. He admitted having had gonorrhœa, and apparently recovered from it. We can hardly suppose that a simple mucous catarrh, lasting but a few weeks, should have any connection with this widespread constitutional disease.

If this has been neither cancer, scrofulosis, nor syphilis, it must have been an instance of that curious disease of the lymphatic system which has been described under the names, leucæmia, Hodgkin's disease, lymphadenoma, and the like. This certainly was not a case of true luecæmia. There are two sets of cases spoken of by this name. In one, the proportion between the white and red corpuscles is greatly increased from the normal of one white to two hundred red, to one to fifty, one to twenty, and one to five, and sometimes, the white globules equal the red. In the second set of cases the white corpuscles do not increase in number, but the red are decreased. This form has been termed pseudo-leucæmia; to this class Trousseau has given the name of lymphadenoma, and Hodgkin, who described it, left his name to distinguish it. The second class seems to be identical with the first in everything except the increase in the number of white corpuscles. This man had no increase in the number of the white corpuscles.

I shall now ask your attention to the specimens before us. This mass, as large as a small fist, was taken from the left groin. It pressed upon and was adherent to the femoral vein, and accounts perfectly for the affection of the left leg. The character of this enlargement is that which we find in leucæmia and pseudo-leucæmia. It is firm. On section it presents a variegated appearance. All the glands along the spinal column were enlarged, and pressed upon the nerves emerging through the vertebral foramina. Possibly they extended through the foramina and pressed upon the cord, but we were unable to determine the exact condition of cord, because we could not obtain permission to examine it.

Here is the spleen, which was the large mass occupying the left hypochondriac region. It is greatly enlarged and the capsule thickened. On section its pulp shows considerable enlargement of the Malpighian bodies, but I do not see any of the white masses so commonly met with in splenic leucæmia. The spleen will often be studded with masses, which careful study show to be aggregations of Malpighian bodies in a state of fatty degeneration.

The liver is also greatly enlarged. It weighs five and a half pounds. There is thickening of the capsule and congestion of the organ, but I do not find any of the little nodules which sometimes result from hyperplasia of the lymphatic follicles within the organ. A small nodule was found at the time of the autopsy, and removed, for microscopical examination.

The kidneys are hardened, and their tissue presents the evidences of chronic congestion. The lining of the pelvis is roughened, and at one point I see a little neoplasm growing from the mucous membrane. This will be removed for microscopical examination.

The heart is not enlarged. The aortic valves are normal; the mitral valve is slightly thickened, but not enough to interfere with its functions. The murmur must then have been chiefly due to the altered state of the blood.

Here, then, is a case in which the history is that of leucæmia, and in which the autopsy shows the same organs, viz., the lymphatic glands, liver and spleen, to be affected as are involved in leucæmia, but in which examination of the blood showed no increase of the white corpuscles. As I have said, there are two forms of leucæmia: true leucæmia, in which the white corpuscles are increased in number, and false leucæmia, in which they are not increased.

This seems to be a case of pseudo-leucæmia, unless the microscopical examination of these glands should show that this is the exceedingly rare affection of sarcoma of the lymphatic glands attended with enlargement of the liver and spleen. It would be extremely rare to have sarcoma occur in a lad in the way this has done, with no pain, with no tendency to invade surrounding tissues, or to suppurate, and lasting for so long a time.

Last winter I showed a case here, in many respects similar to this. It was that of a man covered with lumps. The disease involved the glands of the neck, the axilla, the groin, the ab-

domen, and in addition, they appeared in the subcutaneous tissue everywhere. The skin over these tumors was discolored and adherent, and the swellings were painful. The liver and spleen were not enlarged. As the case advanced paralysis of the legs appeared. At the autopsy, we found that the glands along the spinal column were enlarged and pressed upon the nerves, paralyzing them, and so affecting the nutrition of the cord that structural changes had taken place in it.

The microscope will have to decide whether this has been a case of lymphadenoma or of sarcoma of the lymphatic glands. The clinical history is in favor of the former disease. I shall report to you and show you the drawings of the microscopical appearances of these glands.

NOTE.—The microscopical examination of the glands revealed the lesions of leucæmia.

EDITORIAL DEPARTMENT.

PERISCOPE.

Carbolic Acid and the Carbolates.

The following résumé of the properties and effects (physiological and otherwise) of carbolic acid and its compounds, according to the most recent works on the subject, appeared in the *Progrès Medical*, No. 46, 1882:—

Crystallized carbolic acid is soluble in fifty parts of water (when chemically pure in twenty parts Binz, Hager), and in every proportion in alcohol, ether, chloroform, sulphide of carbon, glycerine.

Absorption is rapid, even through the skin when intact. Elimination is rapid by the skin, lungs and kidneys.

In the urine, when the acid has been introduced in small quantities, a phenol sulphate, non-toxic, is found; when the doses have been large another phenol compound is found (Baumann). The urine is very often of an olive-green or greenish-gray color, particularly when the acid has been absorbed through the skin, or through a wound. In some cases, but rarely, albumen has been found. *Principal physiological effects:* In the dose of from five to seven grains it has no toxic effect.

In larger doses, up to thirty grains, it induces excitation, stupefaction, vertigo, ringing in the ears, feebleness, diminution in frequency of the pulse, fall of temperature, colic and diarrhœa. In toxic doses it causes vertigo, delirium, stupor, anæsthesia, analgesia, intermittence and final arrest of heart in diastole; very rarely convulsions, collapse, coma and death. *Counter-poisons:* Sucrate of lime (Huseman), sulphate of soda and the other sulphates (Bausmann), inhalations of oxygen, bleeding, transfusion (Ferrano).

The local effect produced by weak solutions is a sensation of burning, which disappears in the course of half an hour. This is the effect produced by hypodermic injection of Hueter's solution, which contains two per cent. of the pure acid; it gives rise also to ecchymosis of limited extent, but without the formation of an abscess. Hueter employs it in hypodermic injection, to prevent the spread of erysipelatous inflammations to the adjoining skin; five or six injections, of 20 drops each, are made in the skin, just around the part affected, and are repeated a second time the same day; very often the spread of the inflammation is arrested.

Hypodermic injections of carbolic acid have been employed in intermittent fever, by Jessier, Declat, Hueter, Hirschberg; in prurigo, by Rezek and Fleischmann; in diphtheria, by Frotz; in phthisis, by Schnitzler; in crural neuralgia and pleuro-pneumonia, by Hayem and Kunze; in typhoid fever, by Declat; in malignant pustule, charbon, by Raimbert and Meplain (solution, 1 in 50); in nævus, by Badley; in acute articular rheumatism, by Senator, Kunze and Golbaum.

Borax or Boracic Acid, in Diphtheria.

At a recent meeting of the Clinical Society of London, Dr. Goodhart narrated six cases.

In four a saturated solution of boracic acid in glycerine was used, the application being made in part by a hand-spray, in part by a laryngeal brush, and as often as every two hours, in some cases. In the other two a dilute solution of the glycerinum boracis was used. The first case was a very severe one, and it died from the renal complication on the seventh day, but the boracic acid and glycerine seemed to be so successful in relieving the throat symptoms, and in preventing the re-formation of membrane, that it was determined to try it again. Of the other five, three had "croup," as well as membrane on the fauces; one had nasal diphtheria; all had albuminuria. All recovered. Tracheotomy was necessary in one case, and the glycerinum boracis was freely applied to the interior of the trachea and larynx from the wound, and to the surface of the wound itself, and it seemed to be very beneficial in loosening, dissolving and preventing the re-formation of membrane. In another case it is believed that tracheotomy would have been necessary had not the rigorous application led to the expulsion of membrane by the mouth. In all cases it seemed to give such relief that very little difficulty was experienced in carrying out the treatment. Both borax and boracic acid have been occasionally in use as a topical application in diphtheria, doubtless for a long time past, but not, so far as is known, with any decided success; nor can it be supposed that any remedy will not often show a good proportion of failures in combating a disease such as this. It is enough to say that these agents are known to be good antiseptics, that their action is harmless when not beneficial, and that they are certainly useful in some cases.

Dr. Phillips spoke of two other cases in which glycerinum boracis had been used. It was dis-

covered that glycerine would take up three times as much boracic acid, so that the solution could be made very strong; but this must be diluted once if used in Siegel's spray. Both the cases were *in extremis*, and died, despite tracheotomy, membrane being found post-mortem in the smaller bronchi.

Dr. O'Connor had notes of about forty cases of diphtheria. He had sometimes used a saturated watery solution of boracic acid, but without special success. The most favorable results were got from a solution of chlorate of potash. He had never seen a case of diphtheria in which, on removing a piece of membrane once, there was no re-formation, though this new membrane might be thinner and more delicate looking than the first portion.

Dr. Longhurst thought that the great point was to be very careful not to irritate the parts affected. Diphtheria was a constitutional disease, and we could not expect much from local applications. We should rather rely on the powers of nature, and see that the patient had lots of nourishment and fresh air. He considered the boracic spray to be good, because it did not irritate.

The President said that persons who adopted local applications generally extolled their own particular remedy. He could not agree with the last speaker, that local applications were of no great moment. Diphtheria was of a decidedly infectious character, and infection must take place locally, even if the d sease ultimately became constitutional. As an example of the efficacy of boracic acid, which he was the first to introduce into surgery, the power it had of removing the smell of a putrid onychia was instanced. He had found out that glycerine, by the aid of heat, could be made to dissolve almost any amount of boracic acid. He had used such applications to sores of the nasal and buccal mucous membrane, with favorable results. No doubt the glyceride kept the acid longer in contact with the surface on which it was applied, and this was of great value.

Dr. Goodhart replied that the notion that diphtheria was a constitutional disease, was no argument against the use of local applications, for it was frequently enough this local trouble which was the cause of death.

The question having been raised by the President as to what was meant by the term "constitutional," both Drs. Goodhart and Longhurst said they meant a specific poison, circulating throughout the body and producing local effects.

Embolism in the Spinal Cord.

Cases of embolism of the arteries of the spinal cord are so rare, that the following account of an alleged example of the affection, which we abstract from an article reported in the *Wiener Medizinische Wochenschrift* (Nos. 42 and 43), will probably be read with interest. The patient was a boy aged sixteen years, who, up to June, 1879, was apparently in good health. On the 6th of that month, while at work in the stables, he experienced a sharp pain in the thighs, which traveled thence upward toward the gastric region, and backward to the corresponding portion of the back. Paralysis of both lower extremities, of the vesical and rectal functions, and complete cutaneous anæsthesia of both lower extremities and loins, dated from that time, and for three days and nights severe neuralgia affected the lower extremities. According to the mother's account a deep blue discoloration of the skin about the sacral region was to be seen on the first day after the sudden onset of the disease; and after three or four days a slough appeared, which spread in depth and breadth, till, on his entry into the hospital, it was about two hands'-breadth in size, and laid bare the bone. Similar sloughs appeared, in the course of the next two weeks, over each trochanter major. Four weeks after the beginning of the disease the legs were œdematous. The state on admission to the hospital fully confirmed the account of the previous history. The patient was much wasted and anæmic; there was no sign of cardiac disease. There was no excurvation or irregularity of the vertebral spinous processes, *i. e.*, no sign of disease of the spine. The muscles of the arms were much wasted; both the biceps muscles were tolerably strongly contracted, but with this exception there was no real impairment of movements in the upper parts of the body. Anæsthesia of the lower limbs existed in front as high as Poupart's ligaments; behind, as high as the last ribs. The muscles of the lower limbs were absolutely paralyzed and completely atrophied. The patient could not sit up. No plantar or knee "reflexes" could be got. The urine, which flowed away continually, was cloudy, alkaline, ammoniacal, and contained a trace of albumen, with a sediment of epithelial pus-cells and crystals of triple phosphate. There was no spontaneous action of the bowels.

There was but one rigor, on October 14th, 1879—temperature then 106.5° Fahr.—otherwise there was continued fever, fluctuating between 100.5° and 104° Fahr. Death ensued on October 18th.

At the autopsy some areas of softening in the cortex and underlying white matter of the cerebrum, mostly about the size of a pea, were seen; the whole of the lumbar region of the spinal cord was soft and almost fluid; in both these situations Gluge's corpuscles were found, and the vessels were plugged with tough fibrin. The kidneys were diseased, and there were signs of old infarcts in them. The spleen showed some recent hemorrhagic infarcts. There were vegetations on both flaps of the mitral valve.

The diagnosis of the case during life was one of extreme difficulty. Dr. Weiss, under whose care the patient was, passed carefully in review the causes which would explain the symptoms. Acute myelitis, hemorrhage within or without the spinal cord, embolism of the spinal arteries, successively presented themselves for consideration. Against the notion of embolism was the circumstance that no sign of heart disease was discovered during life. That thrombosis of the vessels existed there can be no reasonable doubt, but it must be a question, considered theoretically and scientifically, whether the plugging of vessels observed was primary or secondary. The fact that large granular cells—so-called inflammatory corpuscles—were found in the softened

tissues is held to be sufficient evidence that the *ramollissement* was a real pathological one. The presumption, it is fair to admit, is greatly in favor of the notion that the case is one of embolism, seeing that evidences of that process existed in the kidneys and spleen, and probably also in the brain.

Severe Injury to Pelvis and Right Kidney.

Mr. Harry Lupton reports the following case in the *Lancet.*

A man aged 69 was run over by a timber wagon, loaded to some three tons; the wheel passed between his legs, went over his pelvis and over the body above the left ilium. On admission to hospital (three hours after injury) he was suffering from shock, pulse small and weak, extremities cold, bathed in cold sweat; chief pain referred to ramus of left pubic bone. Vomiting continued until the next morning. The vomit consisted of a dark, bloody fluid, in small quantities at a time. He had passed water about an hour before the accident, and had no desire to micturate since. Although there was no history of previous stricture, a catheter could not be passed. The patient was supported with brandy and beef tea. The next day there was still retention of urine and no evidence of distended bladder; no odor of urine in breath, and no coma. On the night of the second day the scrotum became so much swollen that a number of punctures were made, from which a considerable amount of blood-stained serum drained away. He became weaker; temperature slightly below normal: perfectly conscious; no evidences of peritonitis at any time; had hiccough, and at 3.30 A.M. on the third day after admission nausea and vomiting returned, and at 5 A.M. he died. The autopsy revealed a collection of serous fluid, distinctly not urine and free from the slightest urinary odor, below the visceral fold of the peritoneum. The pubic bones were separated (not fractured) at the symphysis, for about 2½ inches. The whole of the fundus and anterior wall of the bladder had simply "gone;" about 2½ square inches of the posterior wall was all that remained of the organ. The left kidney was uninjured, the right was deeply bruised and its supra-renal body crushed and torn. The man must have been mistaken about the direction taken by the wheel. In this case there must have been absolute suspension of the renal functions for nearly three days.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——In a reprint of a paper read before the Illinois State Medical Society, Dr. Edward W. Jenks, of Chicago, gives a critical review of the advance of surgical gynecology in 1881. It is a careful epitome of this branch.

——A description of a case of dermoid cyst of the orbit appears in a reprint of a paper, by Dr. Henry Y. Cornwell, of Columbus, Ohio. It is accompanied by a wood-cut of the face, showing the deformity.

——Dr. Alfred K. Hills, of New York, has sent us a reprint of an article "On the Therapeutic Use of Alcohol." He writes from the homœopathic point of view, but does not limit his doses to those usually prescribed by that school. He thinks it is a valuable therapeutic agent in many diseases. We rarely can give our hearty assent to homœopathic therapeutics, but when Dr. Hills says, of Tendency to Suicide, that "*Aurum* is an excellent remedy for this mental condition," we entirely coincide; only, instead of infinitesimal doses, we think United States double eagles, *ad lib.*, would generally prove more successful.

BOOK NOTICES.

A Treatise on the Practice of Medicine for the Use of Students and Practitioners. By Roberts Bartholow, M.D., LL.D., etc. Third edition, revised and enlarged. New York: D. Appleton & Co., pp. 918.

The popularity of Dr. Bartholow's work has been such as to prove that in the plan of its preparation he has suited the wishes of a large part of the American profession. The wide reading of the author has been supplemented by an extensive clinical experience, and he has the ability to present the results of both in a clear and attractive style. Moreover, he has a quick eye for the novelties in medical art; he appreciates the ardent thirst for improved methods of treatment, and the earnest desire for prompt and positive successes, which are characteristic of the better class of American physicians. These traits he understands and addresses, and hence his book is one which is willingly read.

The present edition is larger, by about fifty pages, than the previous one, and the text has received a general revision. A few points have occurred to us, in looking over its pages, which still require expansion. Nothing is said, for instance, of the remote sequelæ of sunstroke, a subject of considerable importance. The later researches on dengue are not noticed, though several valuable contributions to our knowledge of this disease have been made within the last two years.

There are not many such lacunæ. As a rule, the reader will find what he looks for, and the later as well as the standard views of disease and its treatment are judiciously presented. We have no doubt the volume will continue to enjoy its popularity, and it merits its success.

THE

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MARSH FEVER IN ATHENS.

In a paper read by Prof. Caramitzas at the Athens Congress, he states that that capital suffers much from marsh fever. Thus, among the 34,471 cases of disease treated at the Athens Polyclinic during 1860–70, there were 10,373 cases of marsh fever. This statement recalls to mind the fact that the indefinite disease called malaria, marsh fever, and the like is, in our day, particularly prevalent in cities that have been in times long gone, centuries ago, great centres of population, where hundreds of thousands, yea millions of human beings have lived and died. Witness, for instance, Rome, the hotbed of so-called malarial diseases. The practical hint to be derived from this fact is possibly a significant one. Would it not be well for our searchers after the cause of these indefinite diseases to direct their researches so as to determine whether the results of the decomposition of the body of man may not have more to do with their production than is at present accredited to it? The researches that have been so far made on the cause of *malaria* have been so unsatisfactory that none of them now receive the approval of the universal profession.

May this not be due to the fact that we look in the wrong direction for our solution? If it required many hundreds or thousands of years for nature to accumulate the geological formations that exist to-day, may it not be that in thousands of years she has so influenced the soil under her control that she has, by certain chemical changes, so impregnated it with the results of human decay that, when exposed to the air inspired by human beings, it may cause these indefinite diseases?

The fact that these morbid conditions are so prevalent in the class of localities referred to, would seem to lend some force to this idea.

Of course, we realize that in the economy of nature, human decay furnishes vegetable life, and so the cycle of interchange is maintained.

But where we find this so-called marsh fever most prevalent, as in the Roman Campagnas, we also observe that the process of human decay far exceeds the vegetable production. A barren

waste, once thickly populated and therefore naturally saturated with the products of human decay, is now comparatively uninhabited.

There is not a proportionate *vegetable* demand for the *animal* refuse; some of it remains, and in time, undergoing changes about which we are yet ignorant, produces a condition of the soil favorable for emanations, under certain undefined atmospheric conditions, which are capable of producing the so-called malarial or marsh fevers.

We know full well that decomposing organic matter in the vicinity of human beings will produce that indefinite condition of ill health to which some physicians are so fond of applying the term "*malaria.*" Why may not, then, these same agencies, in the course of time, have evolved such conditions as to cause more definite phases of disease in those who inspire the atmosphere contaminated by emanations from such a soil.

The practical point we desire to suggest is, whether it would not be productive of more practical good for our original investigators to direct their researches toward the influence in producing disease that may be exerted by the changes in the soil produced by the remaining in it for centuries of decomposing human bodies.

May not our various specific diseases be made epidemic every now and then by some such cause? If an epidemic of smallpox gives to the soil a manure of smallpox patients, may not the soil, in time, give back to its consumers a crop of the disease? Who can say positively to the contrary? Every once in a while, long interred bodies are exhumed, as when the encroachments of a city or other reasons necessitate the removal of a cemetery.

Since we have no law against vivisection in this country, might it not be possible that some valuable results could be obtained by utilizing some of the remnants of these long dead bodies, and the soil surrounding such, in inoculating animals.

We know that those dead of certain diseases retain their power of infection for some time; do we know that this mysterious power may not be communicated to the surrounding earth, and thus constitute a latent source of epidemics, ready to spring into activity on some suitable provocation? May not the habit of cremation, prevalent in Rome in early times, have had for one object of its institution the idea that bodies dead of disease were capable of transmitting disease through the soil to the living, and that by *burning* such power was destroyed?

All that we have said is, of course, only theory, but it is a theory worthy of consideration.

So far we have been on the wrong track, we fear, in our minute investigation of the etiology of specific diseases, as evidenced by the fact that we have no more positive knowledge than our forefathers possessed.

The most plausible theory of the causation of acute specific disease is that based on chemistry, and with such our suggestions are entirely compatible.

MEDICAL MALPRACTICE.

From the daily press we learn that in the Supreme Court, on November 27th, an opinion of Justice Sterrett was filed, reversing the judgment of the Common Pleas Court of Susquehanna county, in the case of Charles E. Gere against Umstead & Bailey.

The defendants were partners in the practice of medicine and surgery, and in January, 1879, they undertook to treat Mr. Gere for a compound fracture of one of his legs. Gere had sustained a serious injury, by reason of having been run over by a loaded wagon. The doctors attended him continually for about ten weeks, and were then discharged. The limb was saved, but in such a shortened and deformed condition as to partially deprive Gere of its use. Gere then sued the doctors, claiming that they were negligent and unskillful in the treatment of the injured limb, and that, for this reason, it was not as fully restored as it should have been, while he also claimed that his personal suffering was unnecessarily increased. During the trial the injured limb was shown to the jury, and testimony concerning its treatment was rendered by numerous physicians. The jury rendered a verdict

against the doctors, but they appealed to the Supreme Court, claiming that the cross examination of a certain doctor who was called as an expert was not properly conducted. The Supreme Court sustained the appeal of the doctors and reversed the judgment of the Lower Court.

It gives us pleasure to record this act of justice to our profession.

The public are altogether too ready to institute suits for mal-practice, and unfortunately we have some mean, sneaking curs in our ranks, who are all too ready to instigate the same.

It is a well known fact, stated by all authorities, that in compound fractures, shortening and deformity will sometimes occur, in spite of the most skillful treatment, and, in fact, such cases, with subsequent suits at law for damages, have occurred in the experience of the most eminent surgeons of this country.

When a high court of law sees fit to acquit a surgeon of such a grave charge the damage done to his character is but half repaired. The mis led or wilfully vindictive prosecutor or plaintiff should in some way publicly be censured, in order that the community that has heretofore placed confidence in this particular surgeon may have their wavering faith made once more firm, not only by a mere acquittal of actual mal-practice, but by a condemnation of the mean spirit of want of appreciation of services rendered which this growing evil of mal-practice suits shows to be so rife.

MR. SEYMOUR HADEN ON AMERICAN PHYSICAL DEGENERACY.

In a recent issue we had occasion to animadvert rather severely upon what we considered to be a hastily and erroneously formed opinion of Mr. HERBERT SPENCER, concerning the physical deterioration of Americans. We are glad to see that another of our distinguished English visitors, one who, by virtue of his profession, is probably better calculated to form a trustworthy opinion than the great philosopher, has reached a different conclusion.

Mr. SEYMOUR HADEN is a distinguished English surgeon who, by devoting his spare time to the pursuit of art, has come to be recognized, the world over, as the finest etcher of modern times. He, too, was dined and wined by the Lotos Club, in New York. During the course of his after-dinner speech he took occasion to refer to Mr. SPENCER'S address, at Delmonico's, and said:—

"Strange to say, that very reputation for energy which has been found fault with by Herbert Spencer, has been a great attraction for me, in the visit which I am now paying you. I only wish that we had a great deal more of it on our side of the Atlantic. I disagree *in toto* with Mr. Herbert Spencer. It has been my business and my pleasure to see the effect of work, and to judge of it, and I can honestly say that I never saw, in all my professional career, the least injury to life or health result from what Mr. Spencer calls overwork. Only the other day, just before I left England, I was met in consultation by one of the most eminent physicians in London, Sir William Gull. The case before us was that of a man who was said to be suffering from overwork. I asked Sir William Gull if he had ever met with a case of mischief or injury arising from this cause, and he said he had not. So for once, at least, the doctors agreed."

NOTES AND COMMENTS.

Decolorization of Hair Associated with Neuralgia.

The *Medical Times and Gazette* says that M. Raymond relates the case of a lady of 38, who was suffering from neuralgia of the scalp. After suffering several days the pain became much worse one evening, and morphia was powerless to relieve it. At two o'clock the next morning the pain was at its worst. At this moment the hair had its normal color; at seven o'clock the same morning it was found that her hair was almost completely decolorized." It is remarkable that at first the greater part of the patient's hair became red, turning to white a few days later; and later still, falling off in considerable proportion. The case affords an absolute contradiction to Kaposi's theoretical view that blanching of the hair can never take place very rapidly, but *must* require several weeks for its completion.

Borax in Epilepsy.

Dr. Stewart Lockie reports, in the *British Medical Journal*, the case of a boy of seventeen who had been subject to epileptic seizures for four years. At the time of admission to hospital they occurred about once a week. Bromide of potassium seemed to have some slight controlling influence at first, but the frequency soon re-

appeared. On Nov. 28th, 1881, borax, in fifteen-grain doses three times daily, was substituted for the bromide, and it has been continued, with an intermission of nine days, during which the bromide was renewed, to this date (Oct. 21, 1882.) From the time it was commenced no serious fit has occurred, and for the last six months he has had no seizure whatsoever. No skin eruption occurred; vomiting took place occasionally, if the medicine was taken before meals, and at one period he complained of sleeplessness.

Rheumatic Nodes.

It has been a very doubtful question whether rheumatic affections are capable of producing nodes. The various systems of surgery are remarkably reticent on the subject. The case recently reported in the *British Medical Journal*, by Dr. George Mahomed, will therefore prove a valuable contribution to the literature of this subject. In a single woman, aged 54, who was much crippled by subacute rheumatism, he noticed on the inner surface of the right tibia, about two inches above the ankle joint, a vaguely defined, doughy swelling, tender to touch, which was always more painful at night. That the swelling was not due to syphilis was inferred from the facts: 1. Of an intimate acquaintance with her history, and, 2. That it did not improve under specific treatment.

Treatment of Neglected Sprains.

Dr. H. A. Latimer, in the *British Medical Journal*, reports the case of a man suffering from an old sprain of the ankle, of fourteen years' duration. Owing to its being painful, he saved the affected foot and leg as much as possible, resting his weight, when standing, principally on the sound foot. To such an extent did he do this that the muscles of the affected limb commenced to atrophy. Forcible flexion and extension of the joint was made; it was painted with iodine, ammonia liniment was rubbed in daily, electricity twice a week, and he was ordered to use the limb as much as possible. In three weeks time a perfect cure resulted, which has been permanent.

Congenital Absence of Kidney.

The *Medical Times and Gazette* says that Dr. Turbin, of Tiflis, records the congenital absence of the left kidney in a man 60 years old. The ureter on same side was absent. The author was able to gather only 8 cases; in 5 the left and in 3 the right was wanting.

Apparatus for the Treatment of Pelvic Cellulitis.

Acting on the principle taught by surgery, that the best way to produce absorption is by compression, Dr. Pallen described his apparatus for producing compression in pelvic cellulitis, at a recent meeting of the Obstetrical Society of New York (*Am. Jour. Obst.*): The instrument consists of a double water bag, made of rubber, to rest over and below the iliac fossa on either side, and admitting of the use of a greater or less amount of hot water pressure, according as the case might indicate. Counter-pressure could be made from within and below by the introduction of soft clay into the vagina with the patient in the genu pectoral posture. He had treated seven cases by this method, and the result in two had been very satisfactory. Of the other patients, two did not carry out the directions, two were still under observation, and one had been only five days under the remedies.

Pilocarpin in Polyuria.

In a recent memoir (*These de Paris*), M. Dugroux asserts that pilocarpin by hypodermic injection, in the dose of one-sixth to one-third of a grain, has proven successful in some forms of polyuria.

It brought about complete cure in two cases of azoturic polyuria, the one essential and the other symptomatic of interstitial nephritis; in this last case it also caused the disappearance of very marked amblyopia. In two cases of simple polyuria, it caused a notable amelioration of the general symptoms.

It proved unsuccessful in a case of polyuria in chronic saturnine poisoning, in a chronic case of simple polyuria, and in a case occurring to a patient in an advanced state of scrofulous cachexia.

A Tack in the Ear.

Dr. Edward Haughton reports the following case in the *Lancet*:—

A lady consulted me for deafness and occasional throbbing in the right ear, and on examination with the ear speculum I found a black mass on the bottom of the meatus. Being firmly imbedded in a mass of clotted blood, wax and cotton-wool, it resisted all attempts at removal by the use of a large syringe and hot water; but by the aid of a small artery forceps and a short hook, set in a handle, I succeeded in extracting a carpet-tack, head foremost. As the mass completely plugged up the meatus (in which it had been for years), it was very difficult to extract. She now hears perfectly.

Boro-Glyceride.

Boro-glyceride, which has been so highly lauded in England as an antiseptic, and has been recommended as an application to indolent syphilitic ulcerations, is prepared as follows:—

Glycerine is heated to a high temperature, and boracic acid is added as long as it dissolves, the proportion being ninety-two parts of glycerine to sixty-two of boracic acid. When this is allowed to get cold, a white crystalline compound is formed, which disappears on further heating. Water is evolved during the whole of the operation, and at last, when the steam ceases to be given off, the mass sets into a hard, ice-like substance, and is found to have lost in weight exactly fifty-four parts, which corresponds to the weight of three molecules of water.

Persistent Hiccough.

At a recent meeting of the Saint Louis Medical Society (St. Louis *Medical and Surgical Journal*) Dr. Barrett reported the case of a healthy man, thirty-five years of age, who, with the exception of two or three hours, had been troubled continuously with hiccough for five days. Various remedies had been tried without avail. Several other cases were reported by different members of the Society, in one of which the patient, a healthy man, had been so troubled continuously for ten or twelve years. In view of the annoyance which this trouble gives, and the seeming inefficiency of drugs to control it, any successful results obtained would be valuable.

The Best Material for Ligatures.

In the course of an article on "The Choice of Material for Ligature of Arteries in their Continuity," read in the Surgical Section of the British Medical Association (*Brit. Med. Jour.*), Dr. Bennett May discussed the various kinds of ligatures, and related his experience with them. His conclusions are that stout, common gut, of good quality, improved by long keeping in carbolic oil, is a material for ligature which leaves little or nothing to be desired.

Maggots in Fæces.

A correspondent writes to the *British Medical Journal* that he was called upon to attend a boy, aged 10, who had been out of sorts for some time. He was pale, anæmic, and had a foul breath. He finally passed a scybalous mass of fæces swarming with maggots. A quantity of butter in use in the house was found to contain maggots, and this, no doubt, was the origin.

Vaginal Ovariotomy.

Dr. W. H. Baker reported a case to the Boston Society for Medical Observation (Boston *Medical and Surgical Journal*). The patient was placed in Sims' position, the posterior cul-de-sac opened, and the cyst drawn down to the vaginal incision and opened.

The writer's conclusions were that abdominal ovariotomy was always to be preferred to vaginal, except in the few cases (1) where the cyst is small and the contents bland, so that there will be little danger of any, and especially of septic, matter escaping into the peritoneum; (2) of dermoid cysts small enough to be removed by the vaginal incision without evacuation.

Recovery After a Broken Neck.

Dr. C. Jordison reports the following case in the *Lancet:* A man aged 38 received a fracture of the laminae of the 5th and 6th cervical vertebræ. There resulted almost general paralysis. The treatment consisted in absolute rest. He commenced to regain muscular power in three days; at the end of the sixteenth week he was up and walking about, and at the end of the twenty-fifth week he was riding, driving, rowing and swimming, and with the exception of a slight weakness in the left arm, was perfectly well and strong.

Coma During Menstruation Relieved by Venesection.

Dr. H. Goldthwaite reported the following case to the Obstetrical Society of New York (*Am. Jour. of Obst.*): A woman suffering from uterine retroflexion and version suddenly passed, during menstruation, into a state of coma, without any apparent exciting cause. Various remedies had no effect. Finally venesection was resorted to, when she at once began to regain consciousness, and went on to complete recovery. Examination of the urine gave negative results, and there had been no renal symptoms. She had never before lost consciousness.

Imperfect Development of Genital Organs.

At a recent meeting of the Obstetrical Society of Dublin (*Am. Jour. Obstetrics*), Mr. Horne showed a specimen taken from an eight months' child, which only survived a few minutes after its birth. There was an almost total absence of genital organs, except what appeared to be the rudimentary traces of a penis. There was a complete absence of anus. High up in the child's back there was a small pin-hole, but it did not go deeper than the skin.

Special Reports.

No. XI.—Ophthalmology.

BY CHAS. S. TURNBULL, M.D.

(*Continued from page* 642.)

The Progress of Ophthalmology During the Fourth Quarter of the Year 1881, by H. Magnus, Breslau; C. Horstmann, Berlin; and A. Neiden, Bochum; and others.—*Archiv. Ophthal. vol. xii, No. 2.*

Translated by Dr. F. E. D'Oench, New York.

Javal. *Eclairage électrique au point de vue de l'hygiène de la vue.* Soc. de Mèd. Publ. de l'Hygiène Professionelle. Séance du 26 Oct., 1881. *Progr. Méd.* No. 51. Javal hopes that the use of electric light may become universal. If the necessary precautions are observed, especially in the use of goggles, the eye is not endangered. In place of blue or gray goggles, Fieusal recommends yellow ones, as they absorb the violet rays more completely. Mesmil argues against the electric light.

Reich. *Israelites and Military Service. Med. Zeitung,* No. 9. In fifteen cases, all of them Israelites, a traumatic cataract had been intentionally produced, in order to escape military service.—*Hirchmann.*

Weber. *Examination of the Eyes in the High Schools of Darmstadt.* Appendix to the Medical Report of the Grand-ducal Ministerial Department for the years 1877–80. Darmstadt, 1881.

The author treats the subject very thoroughly, and comes to the following conclusions: 1. In view of the injurious results of poor illumination, the windows, where skylights cannot be introduced, should not extend lower down than the height of the scholars when standing upright; where there are windows already, they should be provided with ground glass up to this height, on the south and west sides, in their entire extent; rooms for drawing and female handiwork should be lighted from above. In view of other demands connected with the question of illumination, a revision of the laws governing the building of schools, based on the principles of hygiene now established, is urgently advised. 2. In view of the attributes of a good school-bench set forth, the introduction of Lickroth's school bench, with a top 50 cm. broad, is to be ordered; for drawing and female handiwork, they should be replaced by other apparatus. 3. In view of the different size of the scholars of the same class, they should receive seats corresponding to their height, as determined at the beginning of each term. 4. In view of the necessity of sufficient ventilation, and the injurious influence of long-continued sitting, and its insufficient neutralization by play, as proved by statistics, instruction should be limited to three quarters of an hour at a time, and the remaining fifteen minutes be devoted to gymnastic exercises, drilling, etc. 5. In view of the injurious influence of poor carriage of the body, the teachers are instructed to see that the distance between eye and work is at least 35 cm., and that there is always the necessary amount of light, to be determined by appropriate trial plates. 6. In view of the injurious influence of poor material, all printed matter not in accordance with the principles established in respect to it should be discarded, also checkered blank-books, plates, models for drawing, printed charts, and too fine needlework. 7. In view of the injurious influence of sewing of all kinds on children not at least ten years old, and in view of the necessity of stricter mental occupation at this age, a complete reform of this instruction is demanded. 8. In view of its mentally as well as physically injurious influence, the present system of penmanship should be replaced by a round-hand form. 9. In view of the unprofitableness of dictation, it should be forbidden from principle, and only allowed for the shortest notes. 10. In view of the necessity of constant medical control over the hygienic postulates of the school.

Dufour. *Transplantation of the Conjunctiva.* Transac. of the Intern. Med. Cong., London, viii. *Rev. Méd. de la Suisse Rom.*, 1881, No. 10, Oct. 15. The human conjunctiva may be replaced by that of the rabbit; also by other mucous membranes. There must be no bleeding of the spot upon which the mucous membrane is transplanted. Great care must be taken in applying the sutures; it is best to insert them into the patch before transplanting it. Dufour did not observe any shrinkage of the transplanted piece of mucous membrane. It is not advisable to use salicylic acid during or after the operation.

Förster. *Some Improvements in the Operation for Senile Cataract. Schlesische Gesellsch. f. Vaterländische Cultur,* Oct. 18, 1881. Breslau, *ärztl. Zeitchr.*, 1881, No. 24, and Rep. on the thirteenth meeting of the Ophth. Soc. at Heidelberg. When the cataract ripens slowly a squint hook, after previously making an iridectomy, should be passed over the cornea several times, pressing and rubbing upon it; the corticalis, being not yet entirely opaque, is thus broken up within the capsule. The capsule should not be opened with the cystotome, but with a fine forceps, as in this way the greater part of the anterior half of the capsule may be removed from

the eye, thus diminishing the danger of subacute iritis, of irido-cyclitis. Carbolic acid for disinfecting the eye or the instruments should be discarded. The instruments, however, should be disinfected in absolute alcohol before the operation. Not much weight is attached to disinfecting bandages.

Brettau. *The Local Application of Iodoform.* Report of the thirteenth meeting of the Ophth. Soc. at Heidelberg, 1881. Iodoform not only seems to cause irritation in diseases of the conjunctiva and cornea, but also seems to diminish the secretion of the conjunctiva, to bring about retrogressive changes in granulations, and to act beneficially in sclerosing keratitis. It is used in form of a powder, or as a salve in equal parts with vaseline.

Carreras-Aragó. *Pilocarpine in Diseases of the Eye. Revista de cienc, Med., de Barcelona.* Report C. f. A., p. 341. Its use is indicated in all affections in which an energetic contraction of the pupil is desired; for instance, in conical ulcers threatening incarceration of the iris. *Success slight in detachment of the retina.*

Josso. Paris, 1881. Doin, 60 pages. Out of sixteen cases, fifteen were successfully treated by subcutaneous injections of pilocarpin. Compare the less favorable results obtained by Carreras-Aragó precisely in regard to this point.

Kauders. *Pilocarpine as an Antidote of Atropine. Wiener Med. Wochenschr.*, 1881, No. 45. Pilocarpine is a speedily acting and sure antidote of atropine.

Krömer. *On the Use of Antiseptic Solutions of Atropine and Eserine. Correspondenzblatt f. Schweizer Aerzte*, 1881, No. 19. Boiling the solutions, and adding boracic acid 4:100 and carbolic acid 1:1000, keeps them clear and free from the development of bacteria.

Königstein. *Notes on the Histology of the Eye. Graefe's Arch.*, Bd. xxvii, 3. 1. The nerves of the sclera. The human sclera has nerves of its own ending within it. 2. The pupillary membrane. It consists of four to five larger blood vessels, forming arches; numerous small blood vessels, coming from the iris and communicating with each other, empty into these arches. The centre of the pupillary membrane is always free from blood vessels. The blood-vessels of the pupillary membrane do not come from the circulus iridis minor, but in conjunction with the blood vessels of the ciliary muscle and ciliary processes from the ciliary blood vessels. The retrogressive change begins toward the end of the 7th or the beginning of the 8th month.

Cahn. *The Physiological and Pathological Chemistry of the Eye. Beitschr. f. Phys. Chemie.* Bd. v. p. 214. The reaction of fresh retina is genrally alkaline; on the external surface sometimes acid. The retina of the ox contained water 86.52; albuminous substances 6.77; substances resembling albumen 1.59; alcohol extract 0.25; aqueous extract 0.42; cholesterine 0.77; fat 3.47; lecithine 2.08; soluble salts 0.93; insoluble salts 0.02; traces of cerebrine. There is no essential difference between the chemical composition of the aqueous humor and the vitreous. The lens consists of globuline. In cataractous lenses a decrease of albumen could be demonstrated, as also the coagulation of a portion of the albumen.

Denissenko. *Investigations on the Nutrition of the Cornea. Virchow's Arch.*, Bd. lxxxvi, 3. 1. The cornea does not draw its nourishment from the anterior chamber (Knies, Ulrich), but from the surrounding blood vessels in the sclera. Therefore, the cornea is nourished in the same manner as every other tissue of the body. 2. Although the blood vessels nourishing the cornea are situated in the sclera, at some distance from the sclero-corneal margin, the nourishing fluid, after leaving them, is conducted through the fibres and fissures of the sclera to the corneal margin, where it enters the lacunar system, and is distributed throughout the entire thickness of the cornea, and then discharged into the anterior chamber. 3. The current does not flow from the centre to the periphery of the cornea (Knies, Ulrich), but from the periphery to the centre (Cohnheim, Szokalski), and not from behind, forward (Knies, Ulrich), but from in front, backward. 4. Therefore, the stomata, which Klebs and others have demonstrated in the epithelium of Descemet's membrane, do not form the commencement of Recklinghausen's lymph spaces for drawing nourishment from the anterior chamber, but serve to discharge the waste products. 5. This shows that the cornea does not draw its sustenance from the anterior chamber, but that, on the contrary, the waste products are discharged into the anterior chamber. 6. It therefore follows that the anterior chamber is an enlarged duct for discharging the aqueous humor. 7. Therefore it may be said that not the anterior chamber nourishes the cornea, but the cornea the anterior chamber.

Schmidt-Rimpler. *The Empiric Theory of Vision. Sitzungsber, der Gesellch. zur Beförderung der ges Naturwissensch. zu Marburg*, 1881, No. 4, Dec. A child, three years old, had forgotten its sight so completely, in consequence of an acquired opacity of the lens, that after being successfully operated, it had to learn to see

again. This is against the view of Dubois-Reymond, according to which the ability to interpret correctly the impressions on the senses is not exactly congenital, but comes suddenly, the child not being taught by experience, in the way assumed by the empiric theory.

Frankhauser. *Examination of the Scholars of the High School at Burgdorf for Color Blindness.* Ann. Rep. of the high school at Burgdorf, at the close of the school year 1880–81. Holmgren's and Pflüger's methods were employed. Stilling's plates are not always reliable, and can, therefore, not be recommended. Red-green blindness was found in 6.2 per cent. out of 177 scholars; 44 made mistakes, though not color blind. It is advised to cultivate the color sense at school; the system of Magnus was used for this purpose, with good results in general.

Lagethschnikoff. *A Rare Case of Elephantiasis Palpebrarum. Med. Uebersicht*, Bd. xv, p. 894. Both lids are very much enlarged; the upper hangs down to the nasal angle. The disease began in early childhood. (Hirchman.)

Mandelstamm. *A Case of Sarcomatous Ectropium*, with some remarks upon Trachoma. *Arch. of Ophth.*, Bd. xxvii, 3, p. 101. From the condition of the ectropionized lids, the author concludes that the tendency of the epithelium of the conjunctiva to become hypertrophic is great, not only when directly exposed to the air, but also when, in consequence of unknown injurious influences (dust, smoke, scrofula, barrack air, etc.), trachoma develops. The hypertrophy of the epithelium, together with the hyperplasia of the adenoid tissue, is of primary importance in trachoma; perhaps the pertinacity of the disease may be ascribed to it. When the hypertrophy has once begun, it can cause, at any time, fresh irritations of the adenoid tissue.

E. Grüning. *Traumatic Ophthalmoplegia. Med. Record*, Nov. 12. All the muscles of the left eye were paralyzed by a blow of the fist. The O. N. showed no alteration with the O. S., but there was total blindness. G. thinks there must have been fracture of the pyramid of the orbit, with laceration of the optic nerve. (Swan M. Burnett.)

C. Higgens. *On Distention of the Frontal Sinuses. Guy's Hosp. Reports*, vol. xxv, 27, 1881. A report of four cases in H.'s practice, with critical remarks and citation of published cases and opinions. In case 1, M., 32, there had been abscess in the same place at age 7, and injury followed by removal of dead bone from same place; age 16, tumor noticed eight months. Case 2. M., 13, no injury, swelling noticed six months. Case 3. F., 19, no injury, tumor eight months. Case 4. M., 36, age 14, was kicked over his eyes; age 29, another injury by iron bar over orbit. Pain in L. supra-orb. region began two years later, together with some ptosis, and pain at pulley of supr. oblique. No swelling till three and-a-half years, after which he first was seen, or five to six years after second injury. All treated by free incision and establishment of an opening from floor of distended sinus into nose; result good in all. Remarking on the difficulty of diagnosis in this disease, H. makes the important, and probably new observation, that the swelling (when it has caused absorption of bone) varies in size at different times of day, being smaller after lying down for some hours; *it always points above the tendo oculi.*—*E. Nettleship.*

Kramosztyk. *A Foreign Body in the Orbit. Gaz. lekarsk*, 1881, p. 76. A man 45 years old was attacked with typhoid fever, shortly after having received a blow from the shaft of a wagon. The whole time he was ill he complained of severe pains in the eyes. Three months later slight blepharospasm developed; the eye was deflected inward considerably. There was a small ulcer at the upper inner margin of the cornea, next to which a foreign body, firmly imbedded, was detected by the probe. It was extracted with difficulty and found to be a piece of wood six cm. long. The canal in which it lay had a smooth cicatricial surface, and bone was exposed. The convergent squint was caused by formation of this canal, which extended inward along the internal rectus muscle. Vision was not perceptibly reduced.—*Hirschmann.*

Jsarkiewicz-Ndko. *Cases of Lesions of the Eye, of Traumatic Origin. Gaz. lek*, 1881. After an insignificant injury an inflammation of the orbital tissue set in, which led to the formation of an abscess. The abscess was opened, and a temporary improvement ensued, though there was soon a relapse. The patient, who went elsewhere, was treated expectantly. Three weeks later a second abscess opened spontaneously, and all the symptoms of disease disappeared. The eye, however, was totally amaurotic, showing atrophy of the optic nerve. It follows, therefore, that in abscesses of the orbit an active, not a waiting, treatment must be adopted at an early date.

Berlin. *A Case of Injury of the Optic Nerve Through Fracture of the Optic Canal. Ber. über de* 13, *Vers. d. Ophth. Ges.*, p. 81. The author observed, at the autopsy of a suicide, a fracture of the optic canal, which had severed

the nerve, not only within the canal, but also within the brain.

J. R. Wolfe. *Aneurism of Orbit (Pulsating Exophthalmus) Following Injury Cured by Ligature of Common Carotid. Lancet*, Dec. 3, 1881, (ii, 945). F., 22; symptoms began three months after a blow on left eye, with pain and beating in the head, slight proptosis and bruit heard in orbit; eight months after injury, proptosis greater; a short, pulsating tumor near inner canthus, with thrill and puffing bruit; pulsation stopped by pressure on parotid; papillitis, with extreme venous engorgement. Vision somewhat defective; ulceration of cornea. Ligature of common carotid by Dr. Foulis, eight and a half months after injury; full antiseptic precautions and catgut ligature. Pulsation stopped and tumor much diminished. S. recovered perfectly and O. D. cleared. Four weeks after operation only slight proptosis (E. Nettleship).

Skrebitzky. *Case of Anophthalmus, with Congenital Cysts in the Lower Lids. Klin. Monatsbl. f. Augenhk.*, B., xix, p. 423. In a child six months old, otherwise healthy, and with a normal skull, the orbit was found absolutely empty. Globular tumors of the size of normal eyes protruded upward beneath mucous membrane of the lower lids; fluctuation was easily perceptible. Either they were cysts of the lower lids or malformed eyes.

Kranhik. *The Cause of the Diseases of the Conjunctiva in the Army. Wratsch*, No. 10, 1881. The causes are insufficient sleep, drill in the sun, too tight cravats and collars, besides bad air in the barracks, and diseases of irritability of the conjunctiva acquired before serving.—*Hirschmann.*

Fialkowsky. *A Case of Papulous Syphilis of the Conjunctiva Bulbi. Wratsch*, No. 5, 1881. After a syphilitic angina and condylomata at the anus, a nodule resembling a phlytænula developed on the conjunctiva of the globe three to four mm. downward and inward from the cornea, which ulcerated on the fourth day, and disappeared without any local treatment after fourteen subcutaneous injections of sublimate (cgrm. per dose).

Mikucki. *Eserine in Keratitis, Medycyna*, 1881. Mikucki recommends the use of eserine in ulcers of the cornea, especially at the periphery, basing his advice on the clinical history of twelve cases.

Kramsztyk. *Neuro-paralytic Keratitis, Medycyna*, 1881. Kramsztyk discusses the identity of the so-called neuro-paralytic keratitis, with other affections of the cornea which occur in severe forms of the disease, when the patients remain unconscious for some length of time, with eyes half open. They are due to the loss of moisture of the cornea.

Gouvêa Hilario (de Rio Janeiro). *Aniridia Congenita of Both Eyes, with Deficiency of the Ciliary Bodies and Anterior Part of the Choroid.* Transact. of Intern. Med. Congr., London, vol. iii, p. 120. Man, 23 years old; complete absence of iris in both eyes; lenses dislocated upward, so that there is an aphakic space at the lower corneal margin. No sign of the presence of ciliary processes, nor of the anterior part of the choroid, while the posterior part is more or less normal, as are also the blood vessels of the retina.

Hänsell. *Experiments in Vaccinating Syphilis upon the Iris and Cornea of the Rabbit. G. A. f. O.*, Bd. xxvii, 3, p. 93. The experiments were made with the thin purulent contents of a gumma which was still intact. On the twenty-fifth day after vaccination iritis set in in both eyes, together with the growth granulamas resp. papules and gummata in the ciliary body. When only the cornea was vaccinated, several small, very vascular nodules developed. The animal died after six months of marasmus. The lungs and liver were infiltrated with small tumors resembling tubercles. The same result ensued in about four weeks, when the secretion from "plaques muquesses," well known for its high infectious power, or from particles of a still intact sclerosis, was used. A characteristic difference between the syphilitic and tuberculous nodules consists in much greater vascularization of the former, and in the tendency of the latter to caseous disintegration. Vaccinating with lupus produced no result whatever.

Hosch. *Primary Sarcoma of the Iris. C. f. a.*, Bd. v. p. 361. It has developed in a person 66 years old, at a spot upon the iris where a pigmentation of a darker brown has existed ever since his youth. The tumor proved to be a pigmented spindle-cell sarcoma, which had not yet touched the choroid and ciliary body. The author assumes with Knapp the probability of a conversion of the normal pigmented hyperplastic tissue in the neoplasm during the later years of life. The newly formed pigment undoubtedly comes from the blood vessels.

Hosch. *A Case of Gumma of the Ciliary Body. C. f. a.*, Bd. v. p. 365. The author adds six cases which were overlooked by Seggel in his bibliography in (*loc. cit.*) Patient 37 years old; 7 months after infection a rapidly growing tumor developed under violent symptoms of inflammation of the iris and choroid, and soon

reached the size of a small cherry. Energetic inunction (120 grms. of blue ointment and one grm. calomel were used daily) gradually reduced the size of the tumor until it finally disappeared entirely.

Masse. *Pearly Tumors of the Iris. Rec. d' Ophth.*, July, August, 1881. After an injury of the eye combined with a penetrating wound of the cornea, sometimes cysts develop upon the iris, sometimes solid tumors. Many intermediate stages exist between these two varieties, the serous translucent cysts and the epithelial pearly tumors. Some cysts are almost entirely solid and filled with fat and epidermis cells; the pearly tumors also contain epithelial cells, fat and crystals of cholesterine. The want of an enveloping membrane in the pearly tumors, which the author doubts, constitutes only an apparent difference. Masse reports a case of a pearly tumor of the iris, observed by himself, which had developed around three lashes; they had entered the anterior chamber through a wound and lay upon the iris. The author has shown, by experiments upon rabbits, that when the lashes are deprived of the bulbs and brought into the anterior chamber, they do not cause the development of tumors of the iris; these are due to the presence of the bulb or small particles of the epidermis or conjunctiva. After introducing a piece of conjunctiva into the anterior chamber a cyst and pearly tumor of the iris developed in the same rabbit.—*Marckwort.*

Rymarkiewicz. *Polycoria in the Left Eye. Medycyna*, 1881. The normal pupil was somewhat displaced downward and inward. The second pupil was situated slightly upward and outward, was of an oval shape, with a major diameter of two mm.,and a minor of one mm. The pupil of the right eye is slightly dislocated downward.

Priestley-Smith (Sheffield). *Acute Glaucoma Following Concussion, Cured by Eserine. Transact.* of the Ophth. Soc. of the Unit. Kingd. The *Lancet*, No. 25.

Arlt. *Spontaneous Rupture of the Anterior Capsule of a Cataractous Lens. Ber. d. Heidelb. Ophth. Ges.*, 1881, p. 130. A cataract has slowly developed in a myopic woman, 34 years old; seven years earlier detachment of the retina had taken place. The spontaneous rupture of the capsule happened during the night. A linear section was made, and a portion, consisting of cholesterine and fatty lenticular substance, removed. The eye remained good.

Critchett. *Practical Remarks on Cataract. The Ophthalmic Review*, vol. i, Dec. 1881, p. 21. C. divides his subject into two heads: 1. Cataract during its period of formation. 2. Cataract when it has so far arrived at maturity as to justify operative interference. The first of these he discusses under the head of "Preliminary Treatment of Cataract." He thinks we are too apt to treat cataract patients merely as subjects for operation, and that, consequently, they are often led to seek the advice of unscrupulous pretenders, who either promise to remove the opacity or to arrest its progress. He recommends a constant surveillance of the case from the time the opacity is clearly made out. He next considers the question as to how far it is expedient to inform the patient of the existence of the disease during its early stages. He concludes that it is impossible to lay down any hard or fast rule as regards this, for each case must be dealt with as far as the exercise of judgment will permit, according to its own special requirements. With reference to the question as to what can be done for the patient in the way of palliative treatment, C. speaks of good results being often obtained by the employment of stenopœic glasses, with or without magnifying power. As regards the use of atropine, it is impossible to lay down any rule, but as a matter of policy, he indicates discretion in prescribing it, and insists upon the importance of always ordering a weak solution, and never instilling it into both eyes at once. (Fitzgerald.)

Goldzieher. *Ossification in the Periphery of the Lens.* Ber'd. 13, Heidelb. Ophth. Ges, 1881, p. 155. In a globe enucleated on account of phthisis dolorosa, the anterior surface of the lens was found covered with an osseous capsule. Total detachment of the retina and choroid, due to the contraction of the cyclitic tissue.

Purtscher. *Erythropsia after Traumatic Cataract. C. I. A.*, Bd. v, p. 333. The cataract was absorbed spontaneously and completely. The pupil was perfectly black two and a half months after the injury. V = $\frac{1}{3}$. One morning, five months later, he saw all objects red, and this continued for three days. Two weeks later, after being much heated, the same phenomenon, without any ophthalmoscopic changes. V = $\frac{1}{2}$. Report of a second similar case in senile cataract.

Abadie. *Galvano-puncture in the Treatment of Detachment of the Retina. Soc. de Chir., Séance*, Nov. 30, 1881. *Prog. Méd.*, 1881, No. 49, et *Gaz. Hébd.*, Dec. 9, 1881. Detachment of the retina frequently has a local cause; it is, therefore, open to surgical treatment. Abadie recommends galvano-puncture with a platinum knife for this purpose. The sub-retinal fluid is

allowed to escape through an incision, so that the retina can re-adapt itself. The inflammation which then sets in is supposed to fix the retina in its position. Eight cases were treated; six chronic ones, with transient good results; two cases of limited detachment, with "satisfactory" results. As the tension was permanently reduced in these cases after the operation (perhaps without galvano-puncture, from the detachment.—Reviewer), the author thinks of treating glaucoma in this way (Marckwort).

J. Hutchinson. *On Retinitis Pigmentosa and Allied Affections, as Illustrating the Laws of Heredity. Ophth. Rev.*, vol. 1, Nov., 1881, p. 2. After treating of the disease in general, the author reports his experience in regard to the influence of consanguinity upon the development of retinitis pigmentosa. He possesses the data of twenty-three persons or their families. Eight of these sprang from marriages among relatives, among whom there was no record of a previous case of the kind. Three of these patients were partially or completely deaf. In four of the eight cases, only one person was affected; ten times, more than one member of the family was affected; twice, three children; eight times, two children. In ten cases no consanguinity in the family could be proved by anamnesis, and among these, in five cases, two members of the family were affected. The author thinks that consanguinity is undoubtedly an important factor in the development of ret. pigmentosa, as it is for deaf-mutism and idiocy.

(*To be Continued.*)

CORRESPONDENCE.

Conduct of Labors Made Tedious by Rigidity of the Soft Parts.

ED. MED. AND SURG. REPORTER:—

The tedious case of labor detailed by Dr. Farnham, of Maine (see REPORTER, Dec. 2, p. 642), is interesting, because it is a condition of things frequently encountered by the practitioner, and which causes him more or less annoyance, in proportion to his experience in such matters. I am encouraged to make a suggestion in reference to the treatment of similar cases, which, if adopted and acted on, may be valuable in favoring tranquillity of mind in the physician, his patient and her friends, and avail much as to their bodily comfort. I recall just such cases of rigid and undilated os and vagina to which I have been called just at the hour named, bedtime. I remark that "this is a case that requires time and rest; I will give you a medicine that brings repose, and favors rather than retards labor." I thereupon administer a full dose of morphia sulphate, and retire to my rest, either at the patient's residence or at my own home, if not too far away. When I see her again after several hours, perhaps the morning following, I find that the short, infrequent and inefficient pains gave way in a short time to sweet and tranquil repose; and, though the pains are again commencing, the patient is refreshed and in good spirits, and the entire household serene and satisfied. On examining, I find the vagina less rigid, somewhat moist, and the os patulous and softer. I reflect on the situation, and, if the os is but partially dilated, and the structures yielding slowly, I may, if pressed for time elsewhere, repeat the morphia and allow the dilatation to proceed undisturbed. The parturient is tranquillized by the assurance that the time for delivery has not arrived, and that it is vain to attempt hastening it by forced bearing down efforts, or by any other measure. When the os is at length fully dilated, the vagina has also become much more yielding, and the patient has undiminished vigor to second the expulsive efforts of the uterus, by bringing into action the assisting voluntary muscles. If these are inadequate to bring the labor to a close, the woman is then in a good condition to bear the strain of manual or instrumental interference.

I think it may be taken as an axiom, that a labor that is tedious because of rigidity of the parts concerned in the delivery, from the inefficiency of the pains, perhaps by the shortness of the umbilical cord, but which is unaccompanied by hemorrhage, convulsions or other serious complications, need not occasion grave solicitude or cause anxiety about the delivery. A wise regulation of the efforts of nature, seconding them when helpful and discouraging them when fruitless; a careful husbanding of strength, and the confidence inspired by the equipoise and self-reliance of the physician, avail much in bringing about a happy result in all cases of tedious labor.

E. T. BLACKWELL, M.D.

Paterson, N. J., Dec. 6.

Bovine vs. Human Virus.

ED. MED. AND SURG. REPORTER:—

In the light of recent experience and careful observation, it would seem no wide thrust at the truth to say that, since the universal substitution of bovine virus for the humanized, smallpox has assumed a perennial as well as a continental character.

In fact, since that mighty iconoclast, æsthetics, landed upon the American shore, many grand old usages of great practical utility have been wantonly demolished, and replaced by "the latest thing," which, in very many instances, has proved to be not the *very best* thing; so has it been with the above; for since the old mode of vaccination from the human crust has been supplanted by the bovine lymph, the difficulty of producing vaccinia has increased ten-fold. The human family (except, perhaps, a few monopolists), seem naturally averse to protection even from so dire a malady as smallpox, and when there is added to it half to a dozen fruitless attempts at vaccination, they either neglect it after a few trials, or flatly refuse to submit to further efforts. And again, the act of vaccination is so trifling, per se, that the busy

practitioner shuns it whenever he can, and when there is coupled with it the probability of several failures in the same subject, he almost positively ignores it; and, furthermore, the production of cattle lymph has become so much of a trade, and subjected, in many instances, to such adulterations, as to vastly lessen the confidence of the profession, and even the laity, in its efficacy.

May not, then, these agencies have contributed largely to the manifest increase of smallpox during the last decade of years? For most assuredly its persistency and virulency is increasing with each succeeding winter.

When the good old doctor, prior to 1870, carefully selected his crusts from his healthiest subjects, and was called upon to perform the act of primary vaccination, *the probability of failure seldom entered his mind;* but now the converse is the rule, and while engaged in the operation, he always announces that "this may not take; if so, call again, and we will try it over."

As the present custom was largely introduced for the purpose of disarming those ignorant croakers against vaccination, who here and there infest society, and that its failure to do so is proven by the subsequent enactment of statutory laws making it compulsory, would it not be well to return again to the method in vogue some fifteen or twenty years ago? The immunity from human blood poisoning supposed to be enjoyed when bovine virus is used, is more than offset by sequelæ as fatal, if not so terrifying. Granting the possibility of communicating syphilitic virus by vaccination, who among our oldest physicians will affirm that they have ever personally witnessed such a result. Outbreaks of scrofula and of the eczemas, with an occasional convulsion, and sometimes erysipelas and sloughing about the point of inoculation, have, for all time, been the occasional attendants on vaccination: but have not all operators observed the increased malignancy of these attendants since the exclusive adoption of the present mode? While confessing that recent hobbies in vaccination so fully possess society at present as to make it hazardous for a physician to use other than bovine lymph, yet there seems to be an unmistakable tendency among them not to entirely exclude the present mode, but to secure the rehabiliment of the old. "'Tis a consummation devoutly to be wished."

J. H. Grimes, M.D.

Baltimore, Dec. 4th, 1882.

A Rare Case in Practice.

Ed. Med. and Surg. Reporter:—

Not long since I was called in consultation to see a woman said to be sixty-four years of age. On arrival, I was informed she had not had a movement from her bowels for some ten days, and had been vomiting stercoraceous matter, more or less, for three days and nights. Upon examining the abdominal region I found an unusually solid tumor occupying the abdominal cavity, and upon inquiry, was informed that the tumor had been gradually developing for fifteen years. That it had not been painful or given her any particular inconvenience. We believed the tumor had to do with the obstruction of the bowels. Used injections through a long gum-elastic tube, but without any good effect.

She died within a few hours after my visit, and I requested the Doctor, after her death, to get the consent of those interested to permit us to make a post-mortem examination, in order to ascertain the cause of death.

On opening the abdomen the tumor was found to be bony or ossified, and was without any attachments save by a pedicle some four inches in length, attached to the fundus of the uterus. It was a fibroid tumor, having its origin in the walls of the uterus, and as it enlarged it became enucleated. There were about a dozen smaller tumors of the same kind, in size from that of a hen's egg to small marbles; three of which were also enucleated and ossified, and the others in the walls of the womb. The uterine canal was found to be, by measurement, three and a half inches in depth. Sterility had been her condition through life. The large tumor weighed ten pounds. Upon examining the bowels, we found in the colon, about three inches from the ileo-cæcal valve, a perforation about the size of a pea, and the bowel in a high grade of inflammation around it. Some of the contents of the bowels had escaped into the abdominal cavity. The post-mortem examination demonstrated the correctness of our diagnosis of the case, that the tumor had to do with the obstruction of the bowels.

Evidently the tumor had suddenly changed its position in the abdomen by the woman turning over, probably, in bed, and caught the colon between the ossific growth and the spinal column, and so held it until death ensued.

The deposit in the fibroid, by which it had become bone-like, on chemical analysis, was found to be phosphate of lime, with a trace of carbonate of lime.

Is it probable that any other person ever lost their life from such a combination of causes as occurred in this particular case?

Bloomington, Ill. E. K. Crothers, M.D.

Belladonna vs. Opium.

Ed. Med. and Surg. Reporter:—

On the evening of Nov. 5th, 1882, I was called to see Rosa C., an infant, aged 3 months, of Irish parentage, who had taken, by mistake of the mother, a teaspoonful of a cough mixture containing grs. ij morphiæ and ℥ ij tinct. opii camph. to the ounce. It was just six hours before I saw it. The child lay in convulsions, face deep purple, no pulse at wrist, and apparently moribund. I gave no hope of recovery, but by way of experiment, told the mother I would try belladonna. I gave, per anum, 25 drops of Squibb's fluid extract, in a teaspoonful of warm water, expecting but little result; calling in the morning, I was told that at 3 A.M., 9 hours after giving the injection, the child came suddenly out of a deep stupor, and cried lustily for nurse, and the child made a good recovery in three days; *absolutely* nothing was given but the belladonna, except three teaspoonfuls of strong coffee before I saw the case; a clear argument for the antidotal powers of this remedy, in even desperate cases of opium poisoning. H. L. W. Burrill, M.D.

Bridgeport, Nov. 28th, 1882.

News and Miscellany.

The Recent Epidemic of Measles in Iceland.

Previous to 1882 there had been no general epidemic of measles in Iceland since 1846, a period of thirty-six years, which Mr. Charles E. Paterson, who writes about it in the *Edinburgh Medical Journal* for December, considers due to the fact of its isolated position. As evidencing the extreme contagiousness of measles, the following facts are noted. The disease was introduced into Iceland on the second of May last, by an Icelander, who arrived in Reykjavik from Copenhagen. When he landed he was still in the prodromic stage, and was able to go about. On the night of the third the eruption appeared. He and his family were imperfectly isolated. On May 9th and 10th his wife, four children and maid servant were all taken sick. On the 13th a student, who was in his house on the 2d, became affected. The two men servants of the apothecary, who were in his house on the 3d, and were exposed to no other source of infection, were taken ill on the 14th. A litttle girl, playing with his children on the 2d and 3d, carried the infection to a young woman, who became ill on the 18th. About the 22d the school children commenced to sicken, after which the disease spread rapidly, so that by the end of June 1100 out of a population of 2700 were ill, and six to eight deaths occurred daily. In the beginning of July the epidemic was almost over in Reykjavik, but was extending rapidly everywhere throughout the country. Out of a population of 2700 150 died. A prominent physician states that in his section of the country, out of a population of 6000 or 7000, he only knew of two or three individuals who did not take measles. In pregnant women the disease was very serious, and abortion frequently followed. The greatest neglect of all sanitary precautions obtained throughout the epidemic.

If any sanitary skeptic doubts the evil effects of neglect of strict isolation for the prevention of the spread of infectious diseases, he ought to be disabused of his error by this striking instance.

Wilmington (N. C.) Hospitals.

It is pleasant to read, in the North Carolina *Medical Journal*, of the improvements that are gradually taking place in the South, and none can be more heartily applauded than the establishment of well conducted hospitals. Indeed, good hospitals are as ornamental to a city as its handsome churches, libraries and theatres. A more deplorable and disgusting state of affairs cannot be imagined than the smallpox hospital which was forced upon the city of Wilmington, N. C., by the Freedman's Bureau, immediately after the war. To think that nearly a thousand miserable creatures were treated in this foul den, with no windows, huddled together without discrimination as to sex, fed with bread and soup that was actually alive with maggots, is too horrible to contemplate. It would scarcely have seemed inhuman had the torch been applied to this writhing mass of filth and emporium of disease. It was just such places as this that made the South a hotbed of disease after the war, when all was confusion, law and order forgotten, and dissolution held undisputed sway.

The new hospital is a credit to the city and county, and much forethought was shown in selecting a large tract of land for its erection, so that there will be no lack of space for additions and room for convalescing patients to enjoy the fresh air.

Charleston, too, is to have a new hospital, and thus let the good work go on.

A Noteworthy Example.

Mr. A. J. Drexel, the wealthy banker of this city, has sent his check for $5000, to endow a bed in the wing for incurables in the Hospital of the University of Pennsylvania.

This wing has been built through the liberality of Mr. Henry C. Gibson, another of our wealthy citizens. There are now fifteen beds so endowed. This is a noble charity, well worthy of imitation. But recently a wealthy man, who died, left nearly a million dollars to the government, to reduce the public debt; his money would have done much more good if given or left in the way indicated by Mr. Drexel; for the government has more than it requires, while our benevolent institutions are sadly lacking in material wealth.

One of the most praiseworthy efforts of the new Provost of the University, Dr. Pepper, is the unremitting energy he displays in securing the interest of our representative citizens in the University. If his life is spared, about which there is no reason for anxiety, the University will in time, and at no very distant date, assume such a position as to plainly indicate the wisdom of the trustees in their choice.

Exporting a Glacier.

The enormous mountain of ice, the Fonor-Svartisen, in Norway, is about to become, as we read in the *Revue Scientifique*, the object of a rather curious speculation.

It appears that a company of merchants of Berghen have obtained the right to sell it, in blocks, for exportation. A number of blocks have been taken and found of excellent quality, so that a number of vessels are being prepared for exporting it. As the glacier is about 120 miles square, and but two miles distant from the sea, it is probable the enterprise will prove very successful.

Resurrectionists.

Since our last issue, the principals in the crime of *body snatching*, of which we spoke, have been tried and convicted.

Dr. Forbes, the Demonstrator of Anatomy in the Jefferson College, has been arrested, and is under bail for trial at an early day. Public feeling, especially among the colored people, is very strong, as it naturally would be.

The sentence has not yet been passed upon those convicted, but it will be a very light one, as

the law provides only for a fine of $100 or one year's imprisonment, in the discretion of the Court.

Philadelphia County Medical Society Lectures.

Owing to the great crowds which filled the hall of the College of Physicians to overflowing, to hear the lectures of Professor Austin Flint, the concluding lecture (January 13) will be delivered in the amphitheatre of the Jefferson Hospital.

Change of Residence.

The office of the Missouri Vaccine Farm has been removed from Manchester, Mo., to Webster Groves, St. Louis Co., Mo.

Items.

—Smallpox is reported to be ravaging the East African districts north of Delagoa Bay.

—Dr. C. G. Jennings reports two successful cases of tracheotomy in the Detroit *Lancet*, Dec. 13th, 1882.

—The first work exclusively devoted to midwifery was published in 1513, in Latin, by Eucharius Rhodion.

—Dr. Thomas Dwight, formerly Professor of Anatomy at Bowdoin College, will fill the chair in Harvard lately vacated by Dr. Holmes.

—The establishment of the Chair of Midwifery in the University of Edinburgh antedated a similar departure in the University of Paris by a whole century.

—An hexameter from the "Iliad," to allay the gout, and a verse of "Lamentations," to cure the rheumatism, were among the therapeutic resources of the Ancients.

—Dr. J. D. Brumley has been appointed Commandant and Surgeon of the Soldiers' Home, at Newark, in place of the late Dr. A. N. Dougherty.

—Seven of the present eighteen Professors and Lecturers on Midwifery, in England, were at one time students of Professor Sir James Y. Simpson, in the University of Edinburgh.

—The annual report of the Jefferson Medical College Hospital, of this city, for the year ending December 1, states that there were 1303 patients treated in the wards, and 6601 patients in the out-patient department, making a total of 7904 cases of all kinds.

—During the past thirty years the number of insane persons in the Department of the Seine, in France, has multiplied more than sixfold, while the population has increased barely threefold. The estimated expenditure for the Paris asylums for next year is $960,000.

—On the 9th of February, 1726, the Town Council of Edinburgh, who were then the patrons of the University, consented to have the Theory and Practice of Physics and Chemistry taught in the University, and on the same day this institution was authorized to confer degrees in medicine.

—The terrible hurricane which has played such havoc with the buildings at Manilla would seem to have verified the truth of the adage "that is an ill wind that blows no one any good." It is stated that on the first day after the storm not a single case of cholera occurred in the town or the island.

OBITUARY NOTICES.

WM. C. REITER, M.D.,

for many years one of the leading physicians of this city, died on Tuesday morning, Nov. 28th. He was born in this city, graduated at the Jefferson Medical School in Philadelphia, and practiced in Mt. Pleasant until he returned to this city, in 1854. He was a constant student of literature and science, as well as a physician of deservedly high and widely spread reputation.

DR. J. T. UPDEGRAFF,

member of Congress from the Steubenville, Ohio, district, died at his home in Mt. Pleasant, Wednesday evening, Nov. 29th, aged 60 years. He was born in Jefferson County. He studied at Franklin College, graduated at the Medical School of the University of Pennsylvania, attended the medical schools of Edinburgh and Paris, pursued his profession in the county where he was born, was a successful agriculturist, served as a surgeon in the late war, and for ten years has taken an active part in Ohio politics.

DR. J. FORSYTH MEIGS.

On Saturday afternoon, December 16th, at four o'clock, this distinguished physician died.

Dr. Meigs was a son of Professor C. D. Meigs, who, while a member of the faculty of the Jefferson Medical College, sent his son to the University of Pennsylvania, for his education in medicine, by which act he very naturally incurred the displeasure of his Faculty.

Dr. Meigs was born in this city in 1818, and graduated in medicine in 1838.

He soon became a member of the staff of the Pennsylvania Hospital, and, devoting himself in an especial manner to the diseases of children, he rapidly gained a very extensive practice, and an exalted position among the very best people of the city. He was the author of the medical work, "A Practical Treatise on the Diseases of Children." The deceased was a member of the American Philosophical Society, Academy of Natural Sciences, Pathological Society and Obstetrical Society, a consulting physician at the Children's Hospital and a Fellow of the College of Physicians.

MARRIAGES.

DUFFIELD—WALL.—In the Phillips Presbyterian Church, New York, Nov. 21st, by Rev. Thomas G. Wall, assisted by Dr. Duffield, of Princeton, N. J., and Rev. Edward Wall, of Hoboken, N. J., John F. Duffield, M.D., and Margaret Cecil Wall, daughter of Rev. Thomas G. Wall.

MACPHERSON—SWAYNE—At Frankford, this city, November 26, 1882, by the Rev. J. M. Washburn, Dr. J. W. MacPherson, of Philadelphia, and Miss Ada B. Swayne, of Kennett Square, Pa.

ROBERTS—THOMSON.—On Wednesday, Nov. 22d, by the Rev. S. D. McConnell, Dr. A. Sidney Roberts and Carolina Hazlehurst, eldest daughter of Dr. William Thomson, of this city.